

THE

Desert

Science Library

B 23 1949

M A G A Z I N E



MARCH, 1949

35 CENTS

LONGER-LASTING
TRITON GIVES YOU **AN EXTRA
MARGIN OF SAFETY!**



"ANYTHING WITH **EXTRA
SAFETY** APPEALS TO ME,"

SAYS **TONY LE VIER**
FAMOUS LOCKHEED TEST PILOT

"WITH TRITON, I KNOW I HAVE A
LUBRICATING RESERVE THAT
MEANS EXTRA ENGINE PROTECTION
FOR MY CAR IN EMERGENCIES
OR EVERYDAY OPERATION."

WHAT IS
TRITON'S SECRET?

A RICH, PURE 100% PARAFFIN BASE STOCK,
CAREFULLY PROCESSED BY THE MOST MODERN
REFINING EQUIPMENT, GIVES TRITON ITS BASIC
STRENGTH AND DURABILITY. TO THIS STOCK ARE
ADDED PATENTED COMPOUNDS, WHICH RETARD
ACIDITY, SLUDGING AND CORROSION AND CLEAN
YOUR ENGINE AS YOU DRIVE. THIS COMBINATION
PRODUCES AN OIL SO HIGH IN QUALITY IT LASTS
MONTHS LONGER!

HOW CAN TRITON
LAST SO LONG?

THE MAIN REASON WHY OILS BREAK
DOWN AT THE END OF 1,000 MILES
OR SO IS BECAUSE OF OXIDATION, WHICH
CAUSES SLUDGE, ACIDS AND LACQUER
TO FORM. THE SPECIAL PATENTED
COMPOUNDS WHICH UNION OIL
SCIENTISTS HAVE DEVELOPED COMBAT
THESE CONDITIONS SO EFFECTIVELY TRITON
ACTUALLY FORMS **LESS** SLUDGE AND ACID
AFTER MONTHS OF USE THAN OILS USED
TO FORM IN ONLY 1,000 MILES!



WHAT IS TRITON'S **EXTRA
MARGIN OF SAFETY?**

TRITON WILL LAST FAR LONGER THAN
1,000 MILES. THIS RESERVE STRENGTH
GIVES YOU A NEW LUBRICATING SAFETY
MARGIN FOR YOUR CAR, WHETHER
IT'S NEW OR OLD.

UNION OIL COMPANY
OF CALIFORNIA



Notice: Triton is now sold by
many independent dealers
and garages as well as regu-
lar Union Oil stations. If your
particular dealer doesn't
carry Triton, ask him to stock
it for you.

DESERT CALENDAR

- Feb. 26—March 6—Twentieth Annual Imperial County Fair, County Fair Grounds, Imperial, California.
- March 3-6—Pima County Fair, Tucson, Arizona.
- March 4-6—Annual Desert Gem and Mineral show and field trips, sponsored by Desert Gem and Mineral society of Blythe, California.
- March 5-6—The Fourth consecutive World's Championship Rodeo at Rodeo Grounds, Chandler, Arizona.
- March 5—All-day trip to Asbestos Mine in Pinyon Flats. Meet at Palm Springs Desert Museum, 10 a. m. Bring lunch and water. No hiking.
- March 6—The Intermountain cross-country championships at Brighton, Utah.
- March 12—All-day hike to Painted Canyon near Mecca. Meet at Palm Springs Desert Museum 9 a. m. Bring lunch and water. About six miles round-trip sandy walking.
- March 12-13—Tenth Annual Arizona Sno-Bowl Winter Carnival at Arizona Sno-Bowl, Flagstaff, Arizona.
- March 17-19—Tenth Annual International Desert Cavalcade of Imperial Valley at Calexico, California. Pageant, parades, festivities.
- March 19—All-day hike to Pushawalla Canyon, little known palm oasis near Thousand Palms. Meet at Palm Springs Desert Museum, 9 a. m. Bring lunch. About five miles round-trip easy sandy walking.
- March 21—Color slides of wild flower portraits taken by Frank Winter. Palm Springs Desert Museum, 8 p. m.
- March 23-27—Livestock Show and range stock sale, Fair Grounds, Tucson, Arizona.
- March 26—All-day hike to Chino Canyon to site of proposed aerial tramway. Meet at Palm Springs Desert Museum at 9 a. m. Bring lunch. About eight miles easy but uphill walking.
- March 28—Desert Rock Group lecture, "Cutting and Polishing Desert Gemstones," by John W. Greb. Illustrated. Palm Springs Desert Museum, 8 p. m.
- March 30-April 2—Thirteenth Annual Desert Circus, parade, dances, Palm Springs, California.
- March 31—Special public program "Atomic Physics," a technical and detailed picturization of what everyone should know about the theory of the atom. Also color movie, "The Blooming Desert," Palm Springs Desert Museum, 8 p. m.
- March—Exhibit of watercolors chiefly scenes of Navajo reservation life by Martin H. Gambee, and display of books relating to Gold Rush days, Southwest Museum, Highland Park, Los Angeles, California.



Volume 12

MARCH, 1949

Number 5

COVER	GHOST FLOWER, by Nicholas N. Kozloff, San Bernardino, California.	
CALENDAR	March events on the desert	3
INDUSTRY	Kaiser Came to the Desert for Iron By JOHN HILTON	5
HOMESTEADING	Cabin in the Hot Rocks By RANDALL HENDERSON	10
FIELD TRIP	Turquoise Hunters Have a Field Day By DON INGALLS	13
POETRY	Desert Primrose, and other poems	16
RECREATION	Take It Easy, Hiker! By CECIL EDGERTON	17
PHOTOGRAPHY	Contest winners in January	20
EXPLORATION	Country of Standing Rocks By TONEY RICHARDSON	21
CONTEST	Prizes for photographers	25
WILD FLOWERS	Gorgeous Flowering Season Is Forecast Desert's report for March	26
HUMOR	Hard Rock Shorty of Death Valley	27
LOST GOLD	'Pegleg Smith' of 1949	28
MINING	Current News of Desert Mines	29
LETTERS	Comment of Desert readers	30
NEWS	From Here and There on the Desert	31
DESERT QUIZ	A test of your desert knowledge	39
LAPIDARY	Amateur Gem Cutter, By LELANDE QUICK	40
HOBBY	Gems and Minerals	41
COMMENT	Just Between You and Me, By the Editor	46
BOOKS	Reviews of Southwest literature	47

The Desert Magazine is published monthly by the Desert Press, Inc., Palm Desert, California. Re-entered as second class matter July 17, 1948, at the post office at Palm Desert, California, under the Act of March 3, 1879. Title registered No. 358865 in U. S. Patent Office, and contents copyrighted 1949 by the Desert Press, Inc. Permission to reproduce contents must be secured from the editor in writing.

RANDALL HENDERSON, Editor

BESS STACY Business Manager

Unsolicited manuscripts and photographs submitted cannot be returned or acknowledged unless full return postage is enclosed. Desert Magazine assumes no responsibility for damage or loss of manuscripts or photographs although due care will be exercised. Subscribers should send notice of change of address by the first of the month preceding issue.

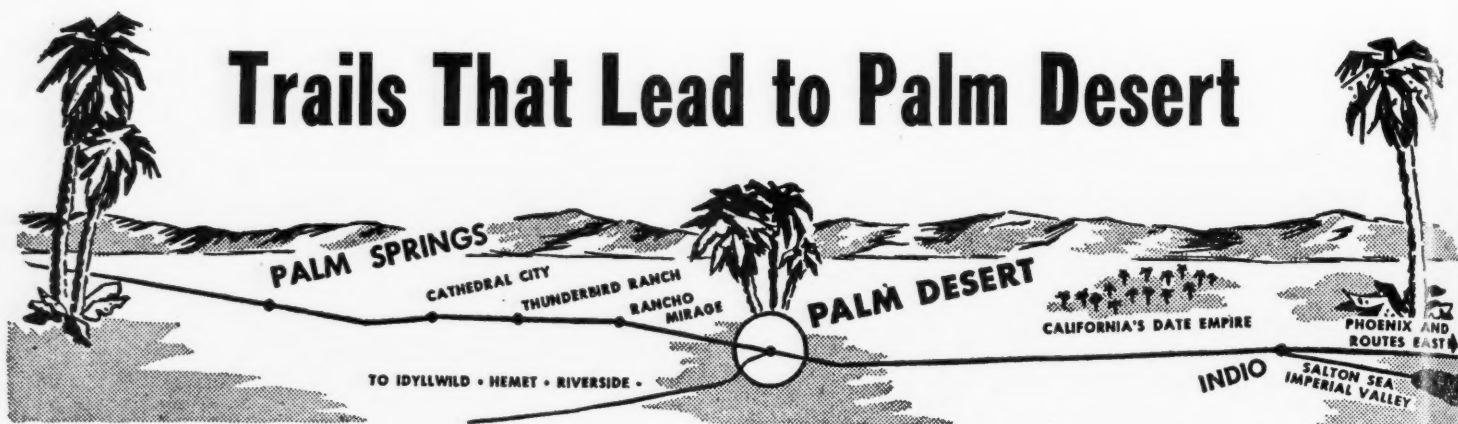
SUBSCRIPTION RATES

One Year . . . \$3.50 Two Years . . . \$6.00

Canadian Subscriptions 25c Extra, Foreign 50c Extra

Subscription to Army Personnel Outside U. S. A. Must Be Mailed in Conformity With P. O. D. Order No. 19687

Address Correspondence to Desert Magazine, Palm Desert, California



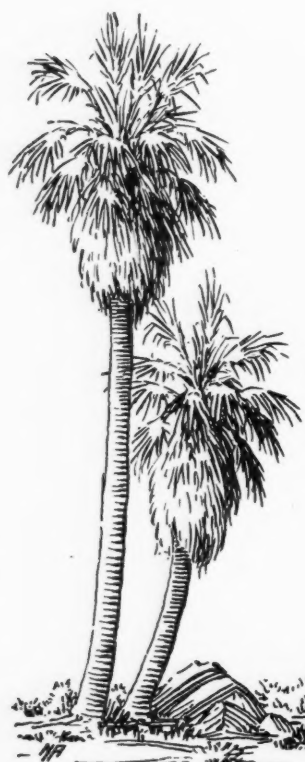
Palm Desert community is less than three years old—it was not until 1946 that the first well was drilled, and the water system and paved streets installed. But long before white Americans came to this sheltered cove in the Santa Rosa mountains the desert Indians were following trails which led to this favored spot.

The Indians found adjacent canyons with cool sweet water, wild game in the mountains that overlook this desert valley, and shrubs that yielded nourishing food. That this was a favorite area for the prehistoric tribesmen is evidenced by the old trails which still are visible, and the campsites

which have yielded many artifacts to archeologists.

Today a new generation of Americans also is trekking to this community—Americans who find here sunny days, clean dry air, good water, and the opportunity to enjoy freedom and relaxation and security beyond the noise and smog of the metropolitan areas.

Here on a spacious lot you can have your own garden and here is every opportunity for recreation—riding, swimming, tennis or hiking in the hills along the old trails once trod by Palm Desert's first people, the ancient Indian tribesmen.



On generous terms you can now buy residential lots in Palm Desert from \$950 up. Many new homes are under construction and costs are becoming more favorable for the builder of moderate means. Now is the time to start planning the desert home you have long wanted to own . . .

For Information Regarding Home or Business Property in Palm Desert Community Write to

PALM DESERT CORPORATION

PALM DESERT, CALIFORNIA

Clifford W. Henderson, Founder, President

Hollywood Office: 8622 Sunset Blvd. — Telephone CRestview 55269

Tract Office on Property or See Your Broker

Edith Ward, Tract Agent



Here is the general view of the iron ore deposit now supplying ore for the mill at Fontana.

Henry Kaiser Came to the Desert for Iron

Bill Bradshaw has been dead 86 years, but if the big bluff frontiersman could retrace the route he once followed up Salt Creek with Chief Cabezon as his guide, he would never recognize the landscape over which he once built a stage road to the placer gold field at La Paz, Arizona. For it was up Salt Creek past Bradshaw's old Canyon Springs stage station that Henry J. Kaiser's engineers have routed the new railroad which brings ore from Eagle mountains to the mill at Fontana. Bill wrote the first chapter in the saga of Salt Creek, and now here is the story of Henry J. Kaiser's second chapter, as reported by John Hilton.

By JOHN HILTON

Photographs by Harriet Bernard

MY LATE friend, Frank Coffee, who lived out his colorful years at Dos Palmas oasis near the west end of Salton Sea, once told me about a prospector friend named Joe Torres who left Needles, California, with his burro for a prospecting trip.

Joe knew the waterholes so well he did not follow the established trails, but headed off across country on a fairly direct route for Mecca, prospecting the adjacent mountains as he went along.

As he neared the east end of the Eagle mountains one afternoon he crossed a ridge covered with huge boulders of iron ore. Joe wasn't interested in iron. He was after gold or silver.

Suddenly the burro balked, with its feet planted on the flat top of a buried mass of iron ore. The animal refused to budge and Joe was puzzled. Jinny had never done this before on the dry hard mesa. She did have a great fear of mud or soft sand along the Colorado river and had given him some trouble in such spots. But here on a dry stretch of desert such obstinacy was beyond understanding. Joe tugged on the rope but Jinny wouldn't move. Then he got behind and pushed and used some language that was not too complimentary, but there was still no action. Jinny just stood rooted to the spot staring at her front feet—picking up first one and then the other and looking at it. Joe got out his prospecting pick and struck the black rock that seemed to be puzzling his traveling companion. It was hard and tough, but a few chips broke



James G. Hansen, mine superintendent, beside the loading conveyor.

off. Amazingly, the fragments, instead of flying away as they should, were drawn back to the mother rock and stuck there. The rock was magnetic! The burro had iron shoes and there was a sticky feel under her feet which had her puzzled and frightened.

Joe found out that his pick would stick to the rock. Here was a curiosity that he should take with him to civilization, otherwise, no one would ever believe his story. The rock under Jinny was too big to take away so he began looking about him. He learned that although the black boulders looked alike, they were not all magnetic. It was some time before he located a piece which would attract his pick and was small enough for him to handle. Jinny, her curiosity finally satisfied, had meandered off and was contentedly munching a bunch of galletta grass.

Several days later Joe and Jinny halted in front of the general store in Mecca and Joe unlashd a heavy black rock from the pack and stumbled up the steps with it. Jinny sighed with relief. Her curiosity had certainly increased her burden! Joe traded the curio to the storekeeper for some grub and the stone with nails and other metal objects clinging to it, rested on the store counter for many years.

That black rock and the mountain where it came from could have brought a fortune to Joe but his knowledge of ores did not go beyond the precious metals, gold and silver. It was years later that another man came along

and looked at this rock with more than idle curiosity. His name was L. S. Barnes. He was young and ambitious. He had studied in the Colorado school of mines and knew his rocks. Recognizing the magnetite, he asked where it had been found. The information was vague but he persisted in his search until he found it. He recognized the value of the ore, and staked his claims. Then he spent months studying the formation to determine its extent and its feasibility as a mining job.

Some of his prospector friends laughed at him and tried to explain that an iron mine had no value in the West, but Mr. Barnes was not easily discouraged. He had an idea and he just smiled to himself and kept working. Finally in 1912 he was ready for action. He borrowed enough money to go to New York and seek a buyer for the biggest iron deposit in the West. The buyer he had in mind was Henry E. Harriman, giant of the railroad industry. It was a nervy thing for a young man to attempt. An interview with the President of the United States probably would have been easier to arrange, but he was very persistent. Barnes had both an iron deposit and an idea to sell to Harriman. The ownership of this mine might be used as a lever to bring down the price of steel rails. Despite his wealth and power, Harriman had never been able to acquire an interest in the steel industry,

Eagle mountain iron mine is a surface deposit and this wagon drill is one of the tools used to break down ore for the crusher.



and he was convinced that the steel trust was over-charging the Southern Pacific for its rails. The idea young Barnes presented was to use the threat of a projected steel mill in the West to force down the price of rails.

Harriman saw the point at once and asked how much Barnes wanted for the property.

"A million five hundred and twelve thousand dollars" was the young man's reply. Harriman wanted to know how he arrived at this figure. Barnes told him the million was for himself, the five hundred thousand was for his associates and others who owned marginal claims, and the twelve thousand would be the estimated cost of patenting the properties. L. S. Barnes returned to California a millionaire.

Harriman bought a steel mill site near San Pedro. A spur railroad was surveyed. Then the price of rails dropped. If Harriman had lived, steel might actually have come to the West at an early date for it is reported that he was genuinely convinced the project was feasible. But Harriman died and the great mountain of iron again slept in peace. Later, others talked of developing the property. Leases were acquired—but these led, not to mining but to litigation. Nothing important was accomplished until the whole world was embroiled in World War II when another man of imagination became interested. His interest finally developed into action. This man was not bluffing. He had built a steel mill at Fontana, California. His name—Henry J. Kaiser.

Under his leadership the Eagle mountain iron deposit was acquired and a great many things began to happen on the desert—things that would have startled old Joe Torres and his Jinny. The flat where the burro had balked suddenly became peopled with workmen and engineers and equipment. The United States Bureau of Mines had test trenches dug across the hills, dividing their black and tan masses into geometrical segments outlined in the greyish white of broken stone. Surveys were made, test holes were drilled, and shipments of ore were trucked to the Southern Pacific at Mecca destined for Kaiser's Fontana plant. The quiet of the desert was shattered by the rattle of drills and the roar of blasts.

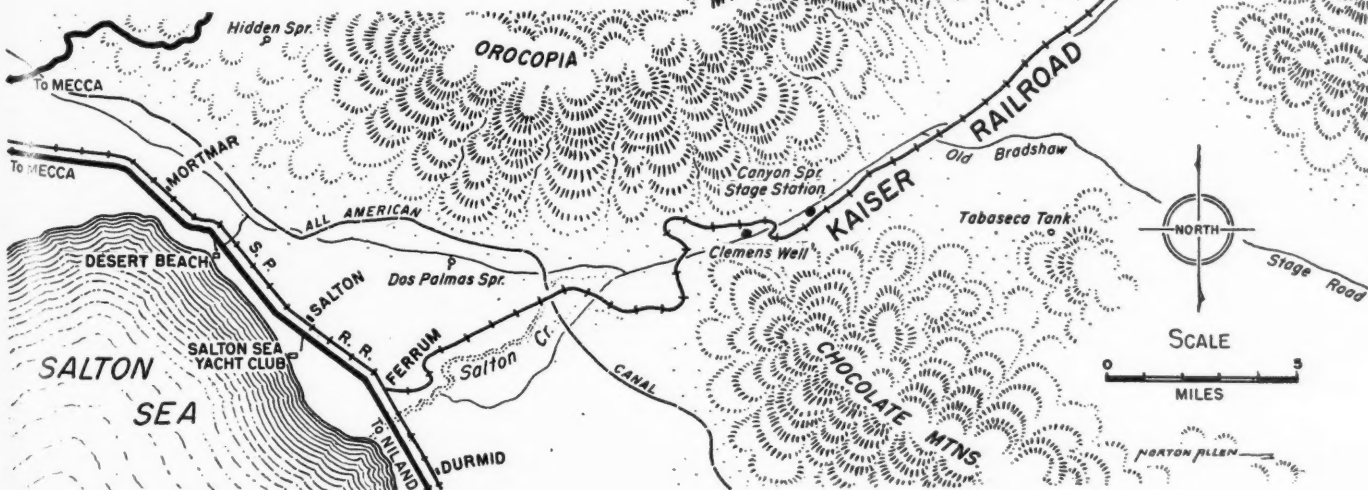
A new name appeared on the railroad maps of the West. It was a siding called "Ferrum" and from this station with the Latin name for iron, a crew of Kaiser engineers and surveyors started out across the desert toward Dos Palmas and the mouth of Salt Creek wash.

A year ago last June actual construction started at the mine. Since then, I have been curious to see what was going on. I had been over the property years ago with Barnes and had camped beside the old rock house where he had lived in the days of his development. My son,

Philip, had camped with me there when he was a small boy and helped me hunt specimens of lodestone. The place had many memories.

Recently Philip and I returned to Iron mountain, accompanied by his friend, Harriet Bernard of Twentynine Palms, who was to take pictures of what we found. Harriet is both a photographer and a rock collector. It was noon when we arrived and presented our credentials to James G. Hansen, mine superintendent. He invited us to eat with him at the mine dining room but we had brought our lunch and asked permission to drive over to the old rock cabin for our picnic. Hansen agreed to meet us later and we took the trail that led to the roofless walls of the old house. On the rocks nearby some of the old-timers had carved their names.

After lunch we climbed the high hill above where we could look down on the camp and present workings. It was a long steep climb but worth it. Below us like a scale model were the administration buildings, warehouses, commissary, homes, dormitories and trailer camp that





Administration and warehouse buildings at the Kaiser mine.

have risen in these last few months. Across from us on the other hill drills rattled on the high ledges. Power shovels whittled away at banks and huge trucks spiraled down wide roads to the crushing and loading plant.

Finally we arrived back at the office where we met the superintendent and he took us in a truck to the actual mining operations. Wagon drills were making two-inch holes in the topmost bench preparatory to blasting ore for the power shovel below.

On a bench below were huge churn drills eating nine-inch holes in the rock to a depth of 40 feet in preparation for a really big blast. A power shovel was loading trucks which careened down the $7\frac{1}{2}$ per cent grade to the crusher below. Hansen explained that the only braking device that would really hold these heavy loads on the road was a hydraulic invention called a hydrotarder. As we started down the hill with one of these trucks behind us I couldn't help hoping that the hydrotarder, whatever it might be, was in good shape.

At the bottom of the hill we watched the trucks dump into a great bin from which ore slid into a jaw crusher

that reduced it to eight inches or less. From the crusher we could see the ore ascending the long rubber belt to be poured on a huge stock pile.

Farther down we stopped at the foot of the stock pile and watched another giant belt emerging out of a tunnel in the pile to carry the ore to another high point where it was dumped into railroad cars. The magic of engineering had worked another modern miracle.

Back in the office Hansen gave us some facts and figures. The first ore went out on the new railroad October 13, 1948. Since then they have been filling an average of 29 cars a day, each loaded with 60 tons of 54 percent iron ore. This is about half of the capacity of the blast furnace at Fontana. In a short time this output will be about doubled and 3500 tons a day will roll down the rails to the siding at Ferrum to be picked up by a Southern Pacific engine and delivered to the Fontana mill.

Engineers estimate that there is blocked out and proven ore to keep output at this rate for 40 years. Our guide also gave us some information on the Kaiser built railroad that carries the ore to the Southern Pacific junction.

In its
The s
622,8
from c

Th
desert
the Sa
to For
of the
direct
hearth
memb

W
Salt C
haul c
by go
that B
las as
the ne
in the
dino,
Coach
Creek
Chuck
near t
road
mark
and M

Jan

St
reco
Janua
moist
value
Al
from
the b
areas.
highw
were s
at Lor

M
and r
in sev
cattle
were
hunge

A
degre
stone,
22; M
Y
hours
Nevad
6 inc
the In
was v
Death
Lake
inches
R
broug

MA

In its 52 miles there are only 2.79 miles of level track. The steepest grade is 2.15 per cent. In its construction 622,885 cubic yards of rock and gravel were removed from cuts and 1,981,471 cubic yards of fill was necessary.

The ore rolls down Salt Creek wash past the long deserted Canyon Springs stage station to the siding near the Salton Sea where engines change and the cars roll on to Fontana. Here the ore is poured into the hungry maw of the blast furnace and from it the molten metal pours directly into ladle cars and is transported to the open hearth furnaces where it is made into steel for structural members, plate, pipe and billets for other fabricators.

When Henry J. Kaiser's engineers ran their lines up Salt Creek preparatory to the building of a railroad to haul ore from Iron mountain, they followed a trail blazed by gold seekers 88 years ago. It was along this route that Big Bill Bradshaw, with Chief Cabezon of the Cahuillas as his guide, mapped a stage and freight line to serve the newly discovered placer gold field at La Paz, Arizona, in the early 'sixties. The gold trail started at San Bernardino, came through San Gorgonio pass, crossed the Coachella valley to Dos Palmas spring, then followed Salt Creek and continued along the southern toe of the Chuckawalla mountains to a ferry on the Colorado river near the present Blythe-Ehrenberg bridge. The old stage road may still be followed for many miles and ruins still mark the sites of the Canyon spring, Chuckawalla well and Mule spring stage stations.

January Storm . . . on the Desert

Storms which in many parts of the Southwest reached record proportions broke over the desert country in mid-January bringing hardship and loss—but also bringing moisture which in the months ahead will be of inestimable value to irrigation farmers and stockmen.

All mountain roads were closed for periods ranging from a few hours to many days. Icy conditions caused the blockading of many highways even in the lowland areas. Hobbs, New Mexico, was virtually isolated by iced highways and broken power lines. Five hundred cars were stalled in Tijeras pass east of Albuquerque, and 300 at Lordsburg.

Mining camps in the high elevations were snowed in, and rescue parties were organized to get food to them in several instances. Planes were used to provide hay for cattle in Nevada, Utah and Arizona when great herds were caught in the drifts. Many livestock succumbed to hunger and cold.

At Barstow, California, the temperature dropped to 5 degrees, and at Holbrook, Arizona, 8 below zero. Tombstone, Arizona, reported 21 degrees, El Centro, California, 22; Mecca, California, 18.

Yuma, Arizona, reported two inches of rain in 24 hours; Williams, Arizona, 23 inches of snow; Goldfield, Nevada, 12 inches; Searchlight, 16 inches; Winnemucca, 6 inches; Banning, California, 14 inches, and much of the Imperial basin in Southern California for a few hours was white with a snow blanket. At Stovepie Wells in Death valley two feet of snow lay on the ground. Salt Lake City reported 8 inches of snow, St. George, 30 inches, and in Millard county drifts piled up to 45 inches.

Rain and melting snow in the Gila river watershed brought down a flood torrent which damaged bridges and



Above—Harriet Bernard, photographer, is fascinated by the magnetic rocks which led to the original discovery of the mine.

Below—Philip Hilton points to the name of the man who sold the Eagle mountain property to Harriman for a million dollars. The old-timers left their insignia on this rock near the Barnes cabin.

made it necessary to evacuate 300 families in the Duncan and Safford areas.

While the snows on the desert lowlands melted within a few hours, all desert ranges above the 3000-foot level were still blanketed with white on February 1.

While it will never be possible to compute all the losses in frozen winter crops and livestock, it is generally felt that the over-all value of the moisture brought to the range and to storage reservoirs will more than offset the damage.

It was one of those storms which come to the desert at long intervals, bringing loss to some and benefit to many.



Built of railroad ties and country rock. The fins, anchored in cement, give added stability to the cabin.

Cabin in the Hot Rocks . . .

Many thousands of Southern Californians have taken advantage of Uncle Sam's Five-Acre Tract law to acquire little homesteads on the desert within a few hours' drive of the Los Angeles metropolitan area. And if you wonder what pleasure or profit may be gained from five acres of rocky terrain that has neither water nor electric service—here is Tommy Tomson's answer.

By RANDALL HENDERSON

WHEN Tommy Tomson heard about the jackrabbit homesteads Uncle Sam was passing out under the Small Tract Act of 1938, he lost no time in staking out a claim. That was in 1945 just after Tommy returned from a hitch he was serving for Uncle Sam out in the Pacific.

Through a friend he learned that a certain Section 36 at the base of the Santa Rosa mountains on the edge of California's Coachella valley had been classified as available for 5-acre homesteaders.

Tommy, whose profession is land planning consultant, went to the U. S. district land office in the post office building in Los Angeles and asked them to get out the maps. They showed him Section 36—just a square 640 acres of land with lines marking off the 5-acre tracts.

He put in his application for a lease—five years at one dollar an acre a year. He was told that deeds would be available later when he had proved his good faith by building a cabin costing \$300 or more.

Then Tommy went out to the desert to see what he had drawn in the 5-acre

grab bag. When an applicant selects his homestead by the sight unseen method as Tommy did, he can never be sure whether his jackrabbit farm will be on a rocky knob so high and windy he'll have to put out anchor chains to hold down his cabin, or in the bottom of a wash where the first cloudburst will float it down the canyon.

The only stakes Tommy could find on Section 36 were the section corners. On a subsequent trip he brought down a transit and a chain and a helper—and eventually located the corners of his 330x660 foot homestead. He wasn't impressed with what he found. Part of the tract was in an arroyo, and the rest of it was a sidehill so steep it would be tough going for a mountain goat. But up on the ridge a couple of hundred yards away he saw a spot that would make the ideal site for his cabin. It was a snub-nosed pinnacle overlooking the checkered floor of Coachella valley, with the Santa Rosa range as a backdrop. Tommy could visualize a little hideout nestling up there among the rocks, accessible only by a winding one-way trail that would be too steep to invite curious idlers.

He returned to the land-office and after some negotiation arranged to swap his original five acres for the pinnacle.

During the months that followed he hired a bulldozer to push the boulders out of the way and rough in a road to the summit, and with pick and shovel he made it a passable trail.

His only spare time was weekends, but he missed no opportunity to spend a day or two at the cabinsite. Sometimes Dorris and Kay and Duchess, his wife and two daughters, and their friends would come down to help him. With a trailer he hauled in lumber and sheet-aluminum. It was a proud occasion when he moved his cot in under his own roof.

But Tommy had not taken into account the perversity of desert winds. One hot afternoon a twister came down the canyon and picked up the cabin and tossed it into a ravine below. Two days later he arrived at his desert "home" to find only a battered heap of wood and iron—all that remained of his cabin. The site had been swept clean.

Tommy looked at the wreckage—

and
some
panic
main
little
Th
draw
nary
When
form
He b



Tomson family: In front, Daughter Kay and her husband, Walter Eichenhofer. In rear, Tommy and Dorris, and their youngest daughter, Duchess.

and grinned. "Guess I've learned something," he remarked to his companion. He looked over the twisted remains of his cabin and saw there was little salvage in the pile.

The next day he returned to his drawing board to plan a cabin no ordinary desert wind devil could dislodge. When the new cabin began to take form it was made of old railroad ties. He bought 110 of them at \$1.00 each,

hailed them up in the trailer, and with the help of a carpenter fitted them into place and caulked the cracks with plastic. He put reinforcing steel through the ties, covered the heavy ceiling rafters with 2-inch tongue and groove sheathing and then anchored the building to the boulders with fins designed both for stability and artistry. The fins are set in cement.

The north side of the cabin is mostly

glass — great sliding full-length windows looking out on the panorama of Coachella valley below, and up to the San Jacinto mountains to the northwest. Soon after the cabin was completed, friends drove up the winding road to Hot Rocks. The Tomsons were away at the time, and the visitors had no calling cards. Then one of them had a bright idea. She registered their names with lipstick on one of the





With a crowbar Tommy cleared a path to the top of the Hot Rocks, a thousand feet above the floor of Coachella valley.

big panes of glass. Other visitors followed the precedent, and Dorris and Tommy decided it was a good idea. So one glass panel has been reserved as a permanent guest register.

The floor is of hand-made tile obtained from a Mexican craftsman at La Quinta, California. The tile is set in cement. In the middle of the big room is a huge boulder which Tommy did not want to disturb. He used no dynamite to level the ground. Crowbars were the only tool available, and many tons of rocks were moved with them to level the 16x29-foot cabin site.

Tommy began his work in June. During the mid-summer days the boulders became so hot it was necessary to wear gloves to work around

them. And that suggested the name for the place. He and his family and friends all know the cabin as Hot Rocks.

With the walls completed and the roof on, he hoisted a 210-gallon wing tank, obtained from war salvage, on the roof to provide a gravity water system. A second wing tank mounted on his trailer brings in water from a well in Coachella valley, and a hand pump has been installed to hoist the water to its tank on the roof. An outside shower was built. Bottled water is brought in for drinking.

The cabin has a big fireplace of native stone, bunks for four people, and a small kitchen. Outside, partly concealed by the rocks is a "Chic Sales" with chemical toilets.

For decoration, Tommy borrowed colors from the desert landscape. The railroad ties are stained to blend with the dark brown desert varnish on the rocks surrounding the cabin. The other woodwork is done in the charreuse of the lichen found on the shady side of the rocks, and the flamingo red of the strawberry cactus.

Tommy's landscaping assignments in recent years have included such well known projects as the Union station in Los Angeles, the Santa Anita race track grounds, the Mission Inn at Riverside, and more recently the Shadow Mountain club at Palm Desert and the Apple Valley community development on the Mojave desert. Tommy has created some very beautiful landscapes, as visitors to these well known landmarks will affirm. But his real landscaping pride is Hot Rocks, where with many tons of country rock and a batch of railroad ties he created a snug little retreat that is proof against floods, windstorms, smog and the clatter of automobile traffic.

When important creative work is to be done, Tommy often steals away from his Beverly Hills office and spends two or three days at his drawing board at the Hot Rocks. His only companions during these working hours are the well-fed family of chuckawalla lizards that live in the rocks by the house, and the skunk which doesn't mind having human beings around as long as they are generous with food scraps.

Hot Rocks represents a total investment of about \$2000 in addition to the work Tommy and his friends have done. But for that investment he has secured a quiet retreat with a million dollar landscape, and all the essential conveniences of a comfortable home despite the fact that there is neither a water system, electricity, gas nor telephones in the vicinity. For cooking they bring in tank gas, and gasoline pressure lamps serve well for lighting. The tank on the roof provides gravity water for the shower.

Recently Uncle Sam's appraisors came out and set a value of \$100 on the real estate, and Tommy now has a deed to his homestead. From their railroad tie citadel 1000 feet high among the rocks on a spur of the Santa Rosas Tommy and Dorris can look down without envy on their neighbors in the valley below—for they have everything the desert can offer—pure air, abundant space, gorgeous sunsets, comfort and peace—and the \$2000 they paid for all this is a mere fraction of what they would have paid the architects and contractors and utility companies for a more conventional home.



Members of the mineral clubs working the Burkhardt turquoise deposits. The tunnel is only ten feet deep, but many fine specimens have been taken from it.

Turquoise Hunters Have a Field Day

By DON INGALLS

JACK BURKHARDT, superintendent of the Lone Pine Water company, grinned wryly and motioned toward the caravan of cars pulling up at the rendezvous point.

"That's the biggest parade of gem-collectors I've ever seen," he remarked.

Jack was right. There were many of them. Nearly all the members of two rockhound organizations were in attendance at what promised to be the most successful turquoise field trip in their history.

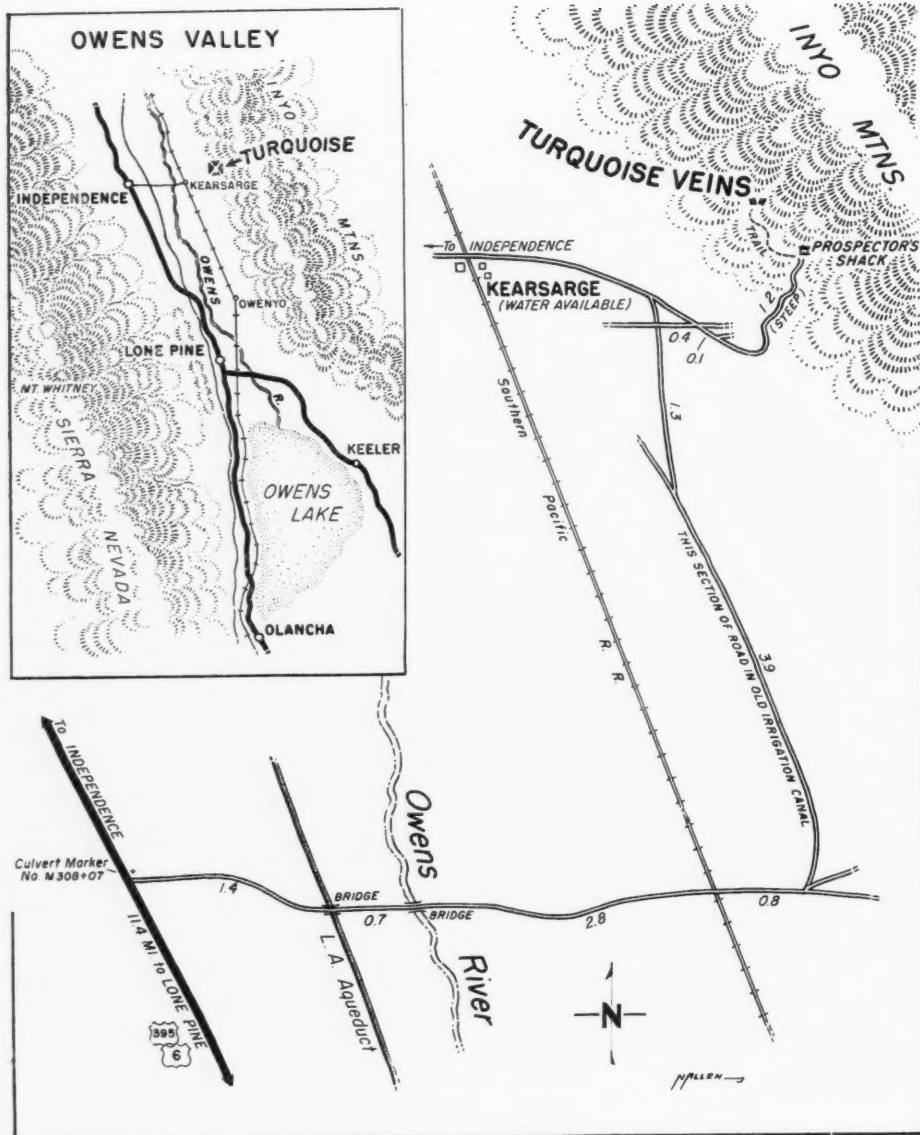
Uncle Sam's Naval Ordnance Training station at China Lake was represented by the active and enthusiastic NOTS Mineral club. In addition, another part of California was equally well represented by the San Jacinto and Hemet Valley club.

For the sake of convenience and expediency, the trip was divided into two sections. Group number one going in Saturday, May 8, and the caboose section joining them early Sunday morning, May 9. Due to the large size of both groups, this arrangement proved very satisfactory.

It isn't every day that the owner of a gem mine—and turquoise at that—will invite the rock collecting fraternity to come in and help themselves. But it happened in Inyo county, California, and here is the story of Jack Burkhardt, the man who is willing to share his mineral wealth with others.

Included in the first section were such desert and club notables as Ed Davis, president of the San Jacinto club and Secretary-Treasurer Ethel Harwell. For the NOTS there was Dwight Crawford, board of directors, and Margery Bissell, treasurer. Guide service was provided by claim-owner Jack Burkhardt, Bill Lewis of the Wagon Wheel mine, Fred Burke, Jr., of Los Angeles, and the writer.

The trail into the deposit leads across the floor of historic Owens valley and for a few miles follows the bottom of a long abandoned irrigation canal,



where a border of dead trees recalls mutely a once verdant growth.

Owens valley proper lies between the Sierra Nevada and the Inyo Mountain ranges. It is about 120 miles in length and varies from six to twelve miles in width.

At the Independence section of the valley the out-wash slope from the bordering mountains has filled the floor to an estimated 2000 feet above bed-rock, the average top-surface height being 4000 feet above sea level.

Mt. Whitney dominates this part of the rugged Sierra Nevadas. To the east the Inyo range (Inyo is an Indian name meaning "The dwelling-place of a great spirit") drops from its 3500 feet into Mazurka canyon, pauses, and slopes down 500 more feet to the Owens river.

Led by Jack in his pick-up truck, the caravan of 15 cars got under way about 10:00 a. m.

When opening his turquoise claims to the collecting fraternity was first

suggested to Burkhardt, he was readily agreeable, but had one stipulation. There must be no dynamite used. It seems previous visitors to his property had blasted many specimens into oblivion and the explosives had caused serious slides in the over-load.

We assured him that true rock-hounds wouldn't even think of using this means to obtain their specimens, especially on another person's property. That was all the assurance Jack needed and with characteristic generosity he bade us proceed with our plans.

He has 12 claims in this group, several of them producing commercial quantities of bentonite as well as turquoise.

Our trail led toward the Inyo mountains, crossing first the aqueduct and then the Owens river. Just east of the railroad we turned due north along the foot of the mountains and followed the old canal bottom.

Roads were in very good condition

at the time of this trip. Although sandy, they were hard packed. A fine surfaced road is nearly completed, leading from Independence directly east to the railroad station of Kearsarge. When it is finished a much more direct route will be available to visiting rockhounds. This road is already shown on most maps.

An old prospector friend of the Burkhardt's has a shack perched precariously on the windswept ridge where the road ends. Here he sojourns between tours into the hills. The old shack serves well as a landmark.

Here we parked our cars, ate a hasty lunch and then Jack led us down a trail northwest from the shack and in a quarter of a mile we came to the deposit.

Where the turquoise occurs the canyon is narrow and steep walled, the gem stone appearing in both banks in oxidized seams, layered between grey slate or schist.

The stone comes in nodules ranging from pea-size up to the largest ever taken from this deposit—a seven and one-half pound beauty now residing in honor at the Burkhardt ranch

MILEAGE LOG

- 00.0 Leave Highway Nos. 6 and 395 on sandy road leading east toward Inyo Mountains. Turn-off is located 11.4 miles north of the Lone Pine hotel, and 50 feet south of Culvert marker No. M 308 07.
- 01.4 Cross wooden bridge over the Los Angeles aqueduct.
- 02.1 Cross second wooden bridge over the Owens river.
- 04.9 Road crosses the Southern Pacific railroad.
- 05.7 Road branches into three forks. Take trail to extreme left. This trail is not as well cared for as one just traveled but is in passable condition. Road now leads up the floor of an old irrigation canal, unused since the river was diverted for use in the Los Angeles aqueduct. Old tree stumps can still be seen on banks.
- 09.6 Road divides. Take right branch.
- 10.9 Turn to right. Trail now leads directly toward Inyo range.
- 11.3 Keep to right.
- 11.4 Keep to right.
- 12.6 Trail winds up sharp grade and ends at old prospector's shack. Footpath at northeast corner of shack leads to turquoise deposit, 1/4 mile from shack.

Note: Good camping sites can be found along old river course. Railroad stop of Kearsarge can be seen from shack. Take road leading to depot and turn left on first sand trail leading left after you have passed station. Follow to bridge (1/4 mile). Look for sites in this vicinity.

ough
A fine
leted,
rectly
Kear-
more
visit-
ready

in Lone Pine. Hard work and much digging produced many excellent specimens for the searchers, but I'm afraid none came close to matching Jack's prize stone.

While the club members scrambled over the rocks, Fred Burke and I set forth on a scouting mission to find a suitable camping spot for the entire group. Although it was still early in the afternoon, the wind slanting down from the lofty Sierras had the touch of snow visible on the peaks, and gave promise of a chilly evening. We headed for the river bottom below.

We found many level and soft, sandy sites along the edge of the river bottoms. Most of them had the partial shelter of trees and brush. When we discovered clear pools of sweet water we looked no further and it was there camp was made.

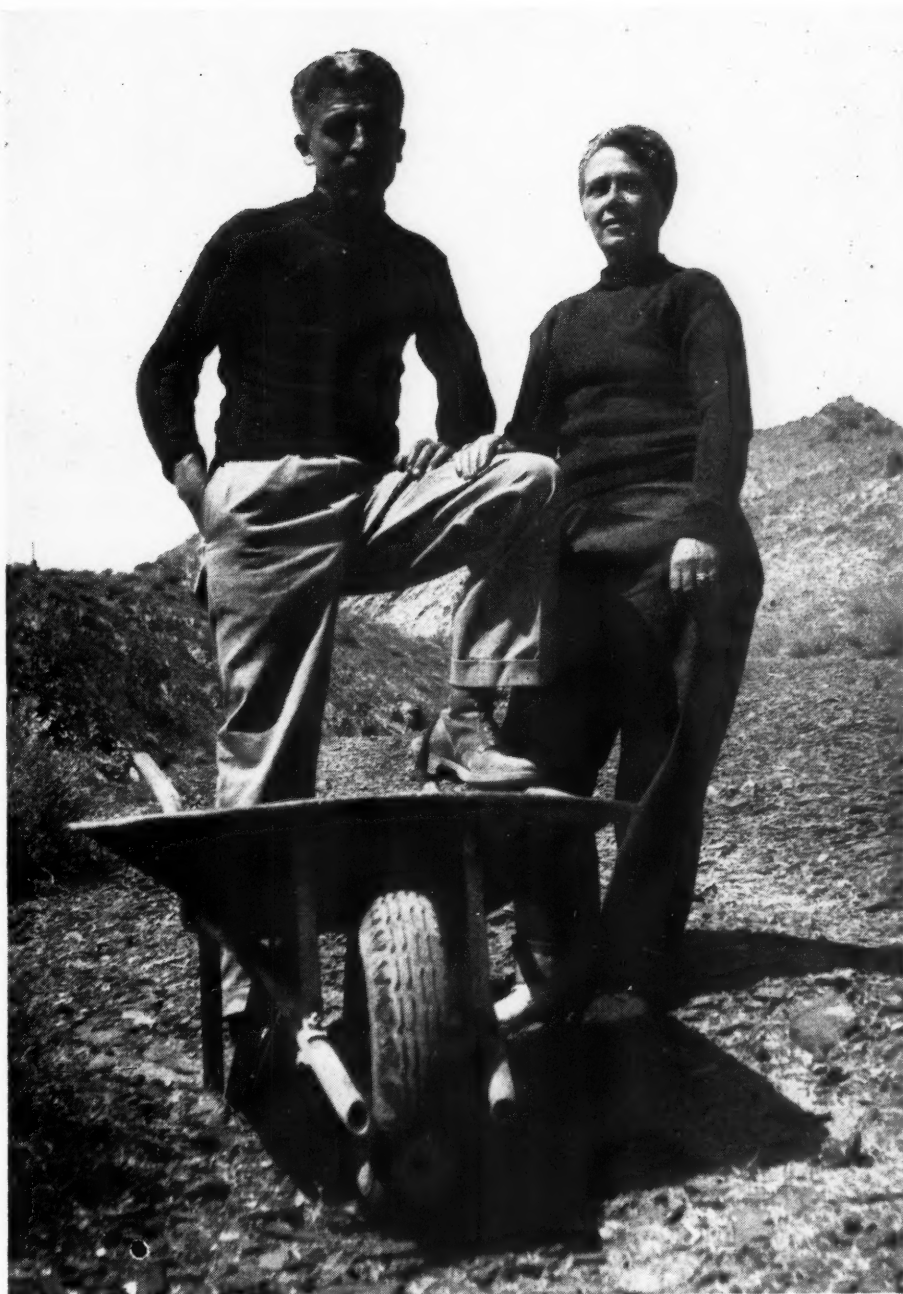
Where is companionship more alluring or satisfying than around a campfire? After the evening meals were prepared and eaten, the youngsters were put into their sleeping bags, and the general camp business taken care of. Then out came the specimens to be compared and the tales.

Some of the club members had brought their fluorescent lamps along. Many pieces of fluorescent rock betrayed their presence by gleaming white and red and yellow. Each new discovery brought excited "ohs" and "ahs" from the onlookers, and avowals to revisit certain spots on the morrow for more detailed search.

Sunday morning, the winds came!

Breakfast that morning proved a trying but hilarious event. One member of the party from China Lake carefully fried his eggs and bacon to a golden brown, placed them carefully on the running board of his jeep and turned to pour the coffee. Swoosh! Eggs and bacon and plate sailed majestically into the air and landed with a dismal plop in the dirt.

By nine o'clock the second group had arrived under the guidance of Bill Lewis and the second visit to the turquoise was made. After spending the night at their Lone Pine ranch home, Jack Burkhardt and his wife returned to help the new group of collectors find their specimens. Jack has lived in this part of the country 41 years and he knows most of the geography like a book. His friendliness and kindly man-



Mr. and Mrs. Jack Burkhardt—owners of the turquoise mine.

ner are well known to most Owens valley residents.

The turquoise claims of course are private property—but Jack is a generous mine owner. Collectors desiring to visit the property should first contact him at Lone Pine, California. This procedure is especially desirable where large parties or clubs are concerned. Arrangements can be made by mail and the trip taken with a minimum of time and expense.

• • • **Gold Hunt Leads to Mummy . . .**

BORREGO SPRINGS—H. A. Bolling of Burbank and C. H. Skutt of Sunland, California, came here January 1 to join the annual Pegleg Smith

Lost Gold trek. Tramping over the Borrego badlands two days later they saw in the distance a black hill that might be the one where Pegleg's black nuggets were found. When they reached the top of the hill they found the mummified body of a man. Uncertain as to whether they were in Imperial, Riverside or San Diego counties they reported their finds to the Desert Magazine office where maps indicated the body was in Imperial jurisdiction. Deputy sheriffs from El Centro took a jeep in and brought out the remains, identified as a Mexican who had died probably three years ago. A partly filled bottle of tequila was lying beside him.



THE DISPOSSESSED

By HELEN VOGEL MOOG
Laguna Beach, California

The wise men of the Mission tribe were gathered now,
Morongos, Anzas, Calientes—all the braves,
And as of old their council fires speared the dusk
And wav'ring shadows seemed to form in spirit shapes.

Few words were said and rather did they seem to wait,
To listen for the heartbeat of the earth whose voice
They know and hold, long lost though the land itself.
So when the fires burned low they knew what they must do.

The white men watched the string of burdened men and beasts
Plod slowly to the mesa far above the town,
And held to scorn the forecast "Rains and flood,"
When molten sun and cobalt sky ruled strong above.
But when the wall of water and the mud flowed in,
They raised their eyes unto the hills and wondered why
That they who made this land their own and hold it still
Have never heard its voice as those—the dispossessed.

LONGING

By ALLEN K. WRIGHT
Long Beach, California

Perhaps it is a foolish notion
But I think you'll understand;
I want to leave the ocean
And roam the Desert land.

I want to take the airways
Far beyond Cajon;
I want to climb the stairways
Of sage and sand and stone.

I crave the thrill and romance
Of lunar's silvered beams;
Where matchless fairies sing and dance
In the valley of my dreams.

I long to sleep beneath the stars
That blaze in Heaven's dome.
Sing the Matim's Golden Bars
And feel once more at home.

SIGNIFICATION

By BROOKS ACEVEDO
Compton, California

Vast, desert valley, silent and serene,
What is the secret of your quiet allure,
When darkness and morning light convene,
And your soundless air makes peace secure?
Flung between the distant hills is found
A wave of dewless plants, all modified
For steady growth upon your roughened ground,
But there among them stand a few that died.
So, desert valley, struggle too is here;
The war of change mixed with stability.
And now your cogent charm becomes more clear,
Here in its varied blend is reality,
While over all the sound of silence reigns
With the stillness your unseen power brings.

PERCEPTION

FLORENCE L. PRIEST
Phoenix, Arizona

Tree shadows growing longer show
That night is creeping up the sky
And earth's warm colors seem to glow
More richly as they slowly die.
Then I possess a farther view,
Find sweeter breath of cooling grass,
Discover skies of deeper hue
As twilight's turquoise moments pass—

Reluctantly I turn to leave.
Departing beauty bids me wait
And jaded senses hunger to perceive
This passing magic that I've found too late.

Oneness

By TANYA SOUTH
San Diego, California

So interwinded are birth and death
And reproduction and decay,
That what we call the aftermath
Has been and still exists today.
There is no past or present haven
Apart from what our lives may hold.
We're culmination and the leaven:
The past, and all that will unfold.

Desert Primrose

By DOROTHY J. SHIPPS
Long Beach, California

Four dainty white petals raised to the sun
To greet his majesty 'er the day's begun,
And the dazzling rays of the first of dawn
Woo the Desert Primrose with a golden song,
While "Hard-Pan" Rat and Horn toad too
Brush the dust away from her one green shoe.
And the whispering breezes pausing there,
Kissing her sweet little cheeks so fair,
Little thing down on the desert bed
Nodding and nodding her frail little head—
Which says plain as anything, blushing with dew,
"Good morning, dear traveler, good morning to you!"

DESERT WINDS

By THELMA A. DOW
China Lake, California

Desert land in all your splendor
With your towering mountains yonder,
Do you hear the winds that whisper?
"We are mightier than thou"

Winds that whisper taunting, softly,
And again with maddening laughter,
Call defiance, screeching vengeance,
"We are mightier than thou"

Drunk with glory of their triumph.
Tearing, biting, clutching, gasping,
Ending with a deathly sobbing,
"We are mightier than thou"

Insane winds—Ah! you poor spirits,
Entwined with demons, unseen souls,
Battling with the mountains yonder,
"We are mightier than thou"

WINTER WINDS ARE HUMBLING

By CONSTANCE WALKER
Los Angeles, California

In prickly rounded contour
A tumble-weed grows trimly,
With stinging barbs of hauteur
Protecting herself primly.

But toward her proud demeanor
Bold Winter-winds are humbling;
In uncontrolled behavior
The prankster sends her tumbling.

HOMELY

By CONSTANCE WALKER
Los Angeles, California

A little stove with climbing stack!
Some think it is a homely thing
But how it cheers this desert shack.
It even makes the kettle sing.

Unfriendly winds in fury roar
That all outside is cold and bare;
Though Winter beats against the door,
The stove creates a homely air.

OF A POET

By ELINOR HENRY BROWN
North Hollywood, California

He breaks the matrix rock of formless thought,
Until some fracture shows an opal gleam.
Then shapes the gem with jewel words that cut
And rainbow-polish his most cherished dream.



Members of the Sierra Club of California are great hikers. This picture was taken on the trail into Fern canyon near Palm Springs.

Take it Easy, Hiker!

By CECIL EDGERTON

FOR many years all of my hiking has been done during the few summer weeks I spend in the mountains. I take no walks during the year, play no strenuous games; just lead an average, busy woman's life, with much of the time spent at my desk. And yet, I am only pleasantly tired after an all day hike while some of the girls in the crowd are exhausted—and goodness knows I am far past girlhood.

My father was English and, like his countrymen, enjoyed walking. He was almost tireless in the mountains. I loved to go with him and unconsciously he taught, and I learned, how to hike without being so tired afterward that all the pleasure of the day was drowned in fatigue. I have since analyzed his teaching and this is what I found.

First, shoes must fit and fit right.

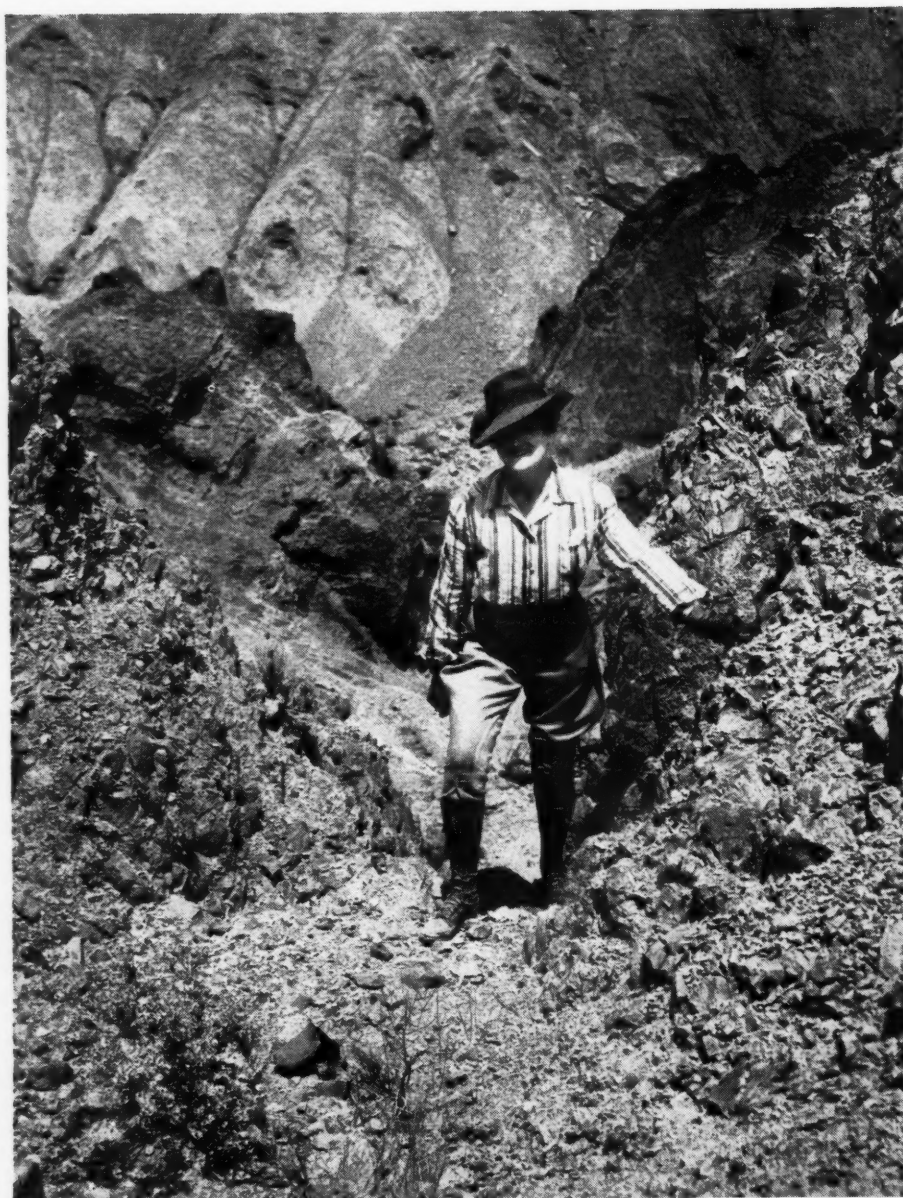
They should be large enough so that cotton stockings can be worn next to the feet and heavy woolen socks over them. This cushions tender feet, absorbs perspiration, and prevents blisters. (Never wear rayon, nylon, or silk.) If your arches are high, have the heels raised and wear arch supports that you have tried out and found to be absolutely comfortable. Shoes should come above the ankle to give it support but don't lace them too tightly. In country where there are venomous snakes, high tops are a protection, but don't wear riding boots. It is more comfortable to ride with hiking boots than to hike with riding boots. Also riding boots have leather soles which are slippery on rocks.

If you get little or no exercise during the year, it is wise to prepare physically a few weeks before you

Millions of Americans walk for exercise, but only a small percentage of them get full value for their efforts because they have never learned the fine points of walking. Just a few simple rules make the difference between a hiker who can spend hours on the trail without fatigue, and the one who is utterly weary at the end of the second mile. Some of the most fascinating spots in the desert country are accessible only to the hiker—and here are some suggestions which will give added enjoyment to the exploration of these out-of-the-way places.

start your vacation hiking. Do some setting up exercises; take some walks, short at first but growing longer; practice some deep breathing night and morning—this is a great help.

Don't try to go on an all day walking tour or climb the highest mountain the first day of your vacation. A nice walk—don't hurry-scurry—in the



The best attire for hiking is the one you prefer. It may be high boots and breeches, or levis and sneakers, or shorts and sandals—depending on the terrain. This is one sport where you wear what you please—and learn by the trial and error method which you prefer.

early morning, and another in the evening—but walk, don't just stroll. For your first longer walk, pack some lunch and walk—don't rush—to some nearby picnic spot to eat it and rest before returning.

After you have prepared yourself with a few such jaunts and made sure that your shoes will keep your feet comfortable, try a hike.

Start out slowly. Don't get excited about what's around the next turn. Take it easy! Walk with long, slow, regular steps, swinging from the hips. Short, fast steps take twice the energy—anywhere. Don't wait until you have to rest before you do it. Rest often, keep breathing deeply—no short, dog pants please. Breathing

with the mouth open increases thirst. If you do have to make a scramble up some steep places and lose your breath, keep your poise. Take long, deep breaths through the nostrils and get that famous second wind. And you may depend on getting it. "Second wind" is not a fairytale. If you are not following a trail and the going is up a steep ridge, don't try to go straight up if it is possible to zig and zag. If there were a trail there, that is what it would do. The extra steps are far less tiring than an attempt at the perpendicular. If the terrain doesn't permit anything but a straight line ascent, try going up sideways part of the time, facing first one way and then the other. This lessens fatigue.

Swing the arms wide. It helps the forward motion of your body. In our normal life many of us forget that the movement of the arms no less than the movement of the legs is an essential part of walking. We get into the habit of swinging them through a short arc that deprives us of any help from that source.

Servicemen returning from overseas reported that the finest marching soldiers in the Allied armies were the black colonial troops from Africa. In marching they swing their arms almost to a horizontal position in front of their bodies. No doubt this is one of the factors contributing to their stamina in the field.

A good hiker can be identified by the footprints he or she leaves in the sand. Inexperienced hikers push from their toes—a seasoned walker from the ball of the foot.

The trail is a good place to practice poise and balance. It is a delight to watch a skilled hiker on the march—head up, chest out, long easy strides with wide swinging arms, pushing forward from the balls of the feet. Such a walker not only will have less fatigue, but will enjoy the experience much more than the companion who is taking short choppy steps, digging in at every step with the toes, with arms hung limp and useless. Correct hiking is a fine art—and the place to practice it is out on the trail where there is abundant space and plenty of good clean air to breath into the lungs.

If you are with others who want to go tearing along like a jackrabbit, remember the hare and the tortoise. Take it easy and you may be the winner. Even the jackrabbit is smart enough not to hurry unless he is being chased. When you stop to admire the view, sit. Take your hundred and some pounds off of those feet! Take it easy!

That goes for food and water too. Don't eat or drink too much and don't eat or drink while overheated or overtired. Rest and cool off a little first; it's nicer to get back to camp on your feet. If you miss your coffee, many of the instant varieties can be made in a cup of cold water. (A tin cup tied to the belt or a collapsible one in the pocket comes in handy for water too.) For an energy snack in the afternoon, I prefer a candy bar to a chocolate bar, but you will crave a drink after either of them. A tiny piece of chewing gum will help to control thirst. Drink if you find pure water, but don't get water-logged. Take it easy.

When you get back to your camp, tent, or trailer, throw yourself on the bed, couch, or ground—anyway, relax a bit but don't get chilled. Then bathe,

rest
and
ter o
the o
it if
this
head
with
them
feast
season
that.
No
you
live
the f
to be
go"
it ea

Do R

TA
when
mark
find.
bitter
seek
Curd
to be
been
estab
social
and
hope
head
enou
its o
grave
in th
Cars
McC
angle
resid
used
Taos
posta
Cars
last
Mou
ing th
New
fame
bring
Colo
Taos
Lodge
Kit C
him a
up th

Death

DE
nial
Death
be co
and
cerem
Nove
civic
geles

MA

rest again, and then eat your dinner; and I'm sure you've never had a better one no matter what it is. If you're the one to cook it, as I am, you'll like it if you've prepared ahead of time for this meal. Something quick to get and hearty to eat, even canned tamales with canned chile beans poured over them will taste better than a wedding feast, for appetite makes the best seasoning and you will have plenty of that.

Now, if you've followed directions, you should be just a good tired. You'll live the day over in sleepy talk around the fireside for a little while, then early to bed, and you should be "rarin' to go" again in the morning. But—take it easy, wait until the next day.

• • •

Do Right by Kit Carson . . .

TAOS—Not one in 10,000 knows where Kit Carson is buried. The poorly marked cemetery in Taos is hard to find. Its run-down appearance is a bitter disappointment to those who seek it out. That is why John J. McCurdy, a Kansas attorney who claims to be descended from the pioneer, has been trying, without much success, to establish a Kit Carson Memorial Association "to perpetuate the memory and achievements of Kit Carson." He hopes that such an organization with headquarters at Taos, could raise enough funds to restore the house to its original appearance, care for the grave, and possibly erect a monument in the town, along with a separate Kit Carson museum. About a month ago, McCurdy decided to try a different angle to attract the interest of Taos residents. He donated money to be used for a newspaper ad calling on Taosenos to campaign for a Kit Carson postage stamp. The cry of "bring Kit Carson back to Colorado" was begun last May by the magazine *Rocky Mountain Life* in an editorial attacking the negligence of New Mexico. "If New Mexico does not appreciate its famed son, let those here who do, bring the great scout's body back to Colorado," McCurdy is expected in Taos in April, and the local Bent Lodge of Masons, who hold title to the Kit Carson house, plan to meet with him and talk over new attempts to set up the association.

• • •

Death Valley '49ers . . .

DEATH VALLEY—The centennial of the heroic Manly-Jayhawker Death Valley expedition of 1849 will be commemorated with an impressive and spectacular pageant and other ceremonies, at Desolation canyon next November. Forty public officials and civic leaders of Inyo, Kern, Los Angeles and San Bernardino counties,



You can identify skilled and unskilled hikers by their footprints in the sand. The novice takes short choppy steps and digs in with the toes. The seasoned hiker takes long easy strides and pushes forward from the ball of the foot.

convened at Furnace Creek inn to form a four-county, non-profit corporation named Death Valley '49ers, Inc., to develop the program of events. Supplementing the pageant it is proposed to place a series of historic markers along the route of the stranded gold-seekers at Death Valley, Trona, Mojave, Newhall and Los Angeles. These will perpetuate the history of this dramatic episode in the history of overland immigration during the Gold Rush of 1849-50. Desolation Canyon is described as a natural bowl for the staging of the show, and although

5000 spectator seats will be erected, the beautiful setting of the colorful canyon will afford hundreds of visitors a nature-made ringside seat.—*Mojave Desert News*.

• • •

A black pottery pot believed to date back to 1050 A. D. has been discovered at Santa Fe. Mrs. Marjorie Tichy, Museum of New Mexico curator of archaeology, said the pot was found when workmen were laying pipes at the capitol annex recently. The pot was found near the remains of an adult Pueblo Indian.



Pictures of the Month . . .

Dune Pattern . . .

First prize winner in Desert's January contest for photographs was won by Don Ollis of Santa Barbara, California, with the above picture, titled DUNE PATTERN. The photograph was taken in January, 1948, with a 4x5 Speed Graphic, using Super XX film and orange filter at 1/25 second, f.16.

Desert Shack . . .

R. Van Nostrand of San Diego, California, won second prize with his picture, DESERTED SHACK, taken in Death Valley. The photograph was taken in January, 1947, on a hazy day at 10 a. m. at 1/50 second at f.16.





This is the scene of the prehistoric battle according to Navajo legend. The white objects in the foreground are parts of human bones which are still scattered over the sands.

Country of Standing Rocks

By TONEY RICHARDSON

THE Country of Standing Rocks was a place I had long wanted to explore. When I could get away, I travelled north from Flagstaff, Arizona, on U. S. Highway 89 to The Gap, thence over a sandy road eastward to Kaibeto trading post.

At the store in conversation with Ralph Jones, the trader, was a young Navajo, Sam Boone. He wanted to get a ride in the direction I was going, to visit his uncle, Hosteen Hudson.

Standing Rocks happens to be an area that exploration and civilization have passed by. No white men, and only few Navajo Indians know anything about it. It is a place of great eroded sandstone monuments that beggar description. Indeed, it can be called a forest of such wonders, including domes, spires and flat arched natural bridges. The latter complete with trees growing on them!

My main interest in the Standing Rocks was historical. I was interested in locating a prehistoric battlefield

Here is the story of an exploring journey made by Toney Richardson and an Indian companion into a region whose inaccessibility virtually has kept it closed to the white man's civilization. The adventurers found a place of fantastic beauty, but there is evidence to confirm the tribal legends that the silence of this remote Country of the Standing Rocks was once broken by the cries of aboriginal warriors.

around which the Navajo have woven a legend.

Sam was glad to join me for the ride. He was not just certain where his uncle's hogan was located.

Returning to the Kaibeto-Gap road we drove three miles into a canyon, then turned north. From this point the roads are mere trails. Four miles along the White Point trail we came to the stone home of Bert Tso. Here we made another turn, to the north-

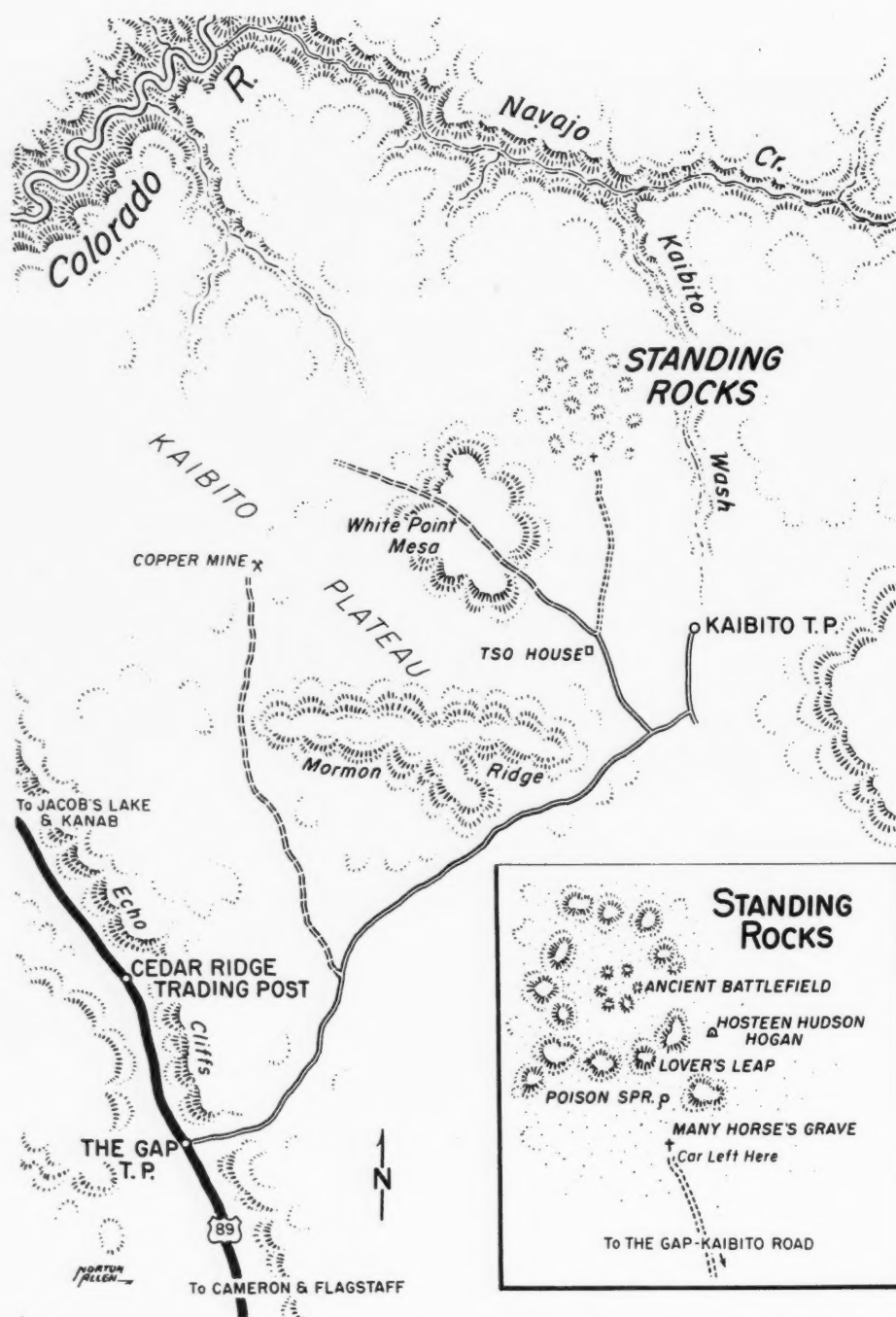
east. After driving six miles, mostly picking our way and making trail and getting stuck in the sand twice, we arrived at a point inside the great area of sandstone domes from which we must explore afoot.

Climbing one of the monuments we reconnoitered, hoping to spot a hogan or a fire. But the Standing Rocks were set so close together it was quite impossible to see any space between them. From the dominance I could readily understand why the Navajo named the place, "The Country of Standing Rocks." The great natural monuments, literally stood across the plateau for miles.

Immediately below me, in a level recess between the domes I counted the whitened skulls of ten horses.

"Hosteen Many Horses was buried here in 1916," Sam told me.

We climbed down, walking among the bones littering the sand. A small lone tree grew in this place. At the base lay what had once been an expensive saddle, silver decorated bridle, saddle blankets, saddle pads, and a pile of rotted fragments of clothing



and woolen robes. Scattered about were a dutch oven and half a dozen pots and pans. Leaning in the lower branches of the tree was a Winchester rifle, metal rusted and the wood eaten from the stock. All this material when deposited with the district chief Many Horses had not been "killed" that is, hacked and chopped and rendered so useless it would not be pilfered from the grave site.

"No Navajo would rob a grave anyway," Sam declared, "and no Piutes ever come this way, so they didn't destroy any of his goods when the horses were sacrificed."

There was no surface indication of the actual grave. It was buried in the sand under our feet.

As we made our way among the pinnacles, we came to one more conspicuous than the others. It has a superstitious significance among the Indians. Sam told me the story.

A Navajo boy and girl were in love. They wanted to marry. The girl's father objected to the youth. His motives were entirely mercenary due to the custom of selling the bride. An old man wanted the girl, and he could pay in horses, sheep, cattle and silver jewelry a thousand times more than the poor suitor could offer.

The lovers slipped away from their hogans, went deep into the Standing Rocks and built a hogan for themselves. The father, enraged, came with a band of his friends. They seized the

youth, tied him to a tree and flogged him with a rope.

The girl was returned home and the old suitor was sent for. He agreed to go ahead with the ceremony. They were promptly married, and as is the Navajo custom, repaired to a separate hogan to spend four days by themselves.

That night as soon as the old man was asleep the girl slipped out, joined her lover and they fled back into the Standing Rocks to the hogan at the base of a great jagged edged dome. Just before dawn they climbed to the top, where they lay down to die on the east side facing the rising sun. But it was not to be so easy.

The father of the girl came once more with his friends. They tracked the pair to the hogan, then to the side of the dome where they climbed upward. Refusing to answer commands to come down, the father and his men started up after them.

It was then the lovers arose, went to the rim and jumped together. Their bodies crashed into a shoulder about half way down, and rolled on into the rock below to succumb to injuries. An eroded red streak stretches down from this shoulder of solid stone to the base. To this day the Navajo call this great standing rock "The Place Where the Two Who Would Marry Died Together."

As Sam and I hiked through the rocks we kept watch for sheep trails, knowing they would lead us to one of the few hogans in this area.

There were springs of water and places of green grass among the Standing Rocks. We came to one that showed no sign of being used by the Navajo, not even for stock water. The grass was ungrazed. Sam wanted to avoid this place.

"Here is evil," he said. "The water is poison."

The spring bubbled out of the base of the monument into a small basin of crystal greenish water, spilling along over the ground for a few feet and then disappearing.

"Not even birds and animals use this water or grass," Sam pointed out. No birds were about, not even the mourning dove which is to be found throughout the Navajo country where there is water.

A mile from this spring we came upon a narrow sheep trail. Following it we arrived at a small hogan in the middle of the afternoon. Here a healing ceremony was taking place.

"She has the swelling sickness," one of the medicine men explained, pointing to the patient, a woman.

Obviously there was something seri-

ously wrong with the woman. Tall, she must have weighed close to 300 pounds. I have never seen a Navajo woman so fat. Over her body two medicine men had painted in black and blue colors an intricate interlaced design. It covered every part of her skin.

These people knew Hosteen Hudson, and gave us directions for finding his camp. We walked for an hour before arriving at the small park where three hogans stood. The place was empty, though in the hogans were the family possessions.

Sam stated that his uncle had an old wagon. He could bring it in here from the east side of the Standing Rocks, though hardly any farther. We finally discovered wagon tracks together with a trail of sheep going into the northwest. We followed perhaps half a mile, and found the wagon with the harness piled on the double tree.

All tracks were many days old. The three hogans must have been deserted for nearly a month. Following the old tracks of men, horses and sheep we came into a narrow saddle between two great white and pink domes. Beyond that point it appeared that attempts had been made to erase the tracks.

Sam was at a loss to explain the circumstances surrounding the abandonment of the camp. There seemed to be only one direction they could have gone. We went on walking, discussing the matter. The sun was low on the horizon when we finally heard a sheep bell tinkle not far off.

Hurrying toward the sound of the bell we heard more sheep, and then caught the smell of burning wood. Rounding another of the closely set great domes we came upon brush shelters in a small spring fed park. Here also was a corral for Hudson's small flock.

Only the women and children were in camp, gathered in the largest of the hastily constructed ramadas. They gave us a friendly greeting, but were vague as to where the men were. The inevitable pot of coffee was on the fire, coffee and sugar boiling together. The women now started cooking bread and roasting mutton. Sam and I drank coffee while visiting with these friendly people.

The sun went down. The blue-blackness overhead became dotted with glowing points of bright silver. Then Hosteen Hudson accompanied by four men of the family appeared as if from nowhere. Their clothing was dirty and torn. Each man carried a seamless bag heavy with unknown content. They deposited these out of the way, came



Where Hosteen Many Horses was buried in the Country of the Standing Rocks. Against the gnarled juniper tree is an old saddle blanket, saddle and rifle. Hosteen Many Horses died in 1916, and his burial was in a place so inaccessible the Navajo did not believe it necessary to "kill," which means mutilate beyond possible use, the belongings which went to the grave with him. The skulls of several of his horses which were shot as part of the burial ritual, are scattered over the sands in this area.

forward to shake hands and sat down to smoke.

Supper was ready so we moved nearer the fire to eat. Not until after we finished did Hosteen Hudson relax and talk. He explained that the sacks contained "colors" which they had been mining. This accounted for all the secrecy. He did not wish the source of his exceptionally good paint pig-

ments to become known to other Navajo lest he be deprived of the revenue gained through the sale of the pigment to medicine men.

The mine which we visited the following morning consisted of two tunnels not more than ten feet long in the sides of a soapy looking shale formation not far from the temporary camp. From one of these came a soft red



In a brush ramada the Navajo women weave their blankets while the older children tend the sheep and the men mine paint pigment from a nearby deposit.

ochre; from the second a dull looking stone which when baked became a bright yellow. In the park lay a heap of weathered gray earth which when mixed with water provided a white body paint. On the northern tip of this same vicinity Hosteen Hudson obtained a blue and green paint substance. He said he came here once a year in secrecy to mine enough of these various colors to keep him in stock a full year.

Having almost completed his work, Hosteen Hudson felt free to conduct us to other interesting places. We proceeded first to The-Place-of-the-Spear, where he related that shortly before the Navajo were imprisoned at Bosque Redondo in 1864, a war party of Ute's chased a band of beaver trappers into the rocks and kept them surrounded until the trappers were all killed.

Not far away stood a great salmon

pink sandstone rock known as the Coffee Pot, because of its shape. Two white prospectors had been slain here in the 1880's admittedly by Navajo because they were thought to be snooping around where they had no business.

Borrowing horses from Hosteen Hudson we rode around many of the more prominent Standing Rocks. Most of them have descriptive names. On the north side of the area is Kitchen Midden, Metate, Spanish Bell, Hopi House, and Goat's Head.

In the center and on the east side are numerous fantastic shapes. There is Sombrero Rock, about one hundred times as large as the one of the same name a few miles away on White Horse Mesa. Old Man Bending Down is near Brown Streaked Rock. There is White Woman's Cake Rock, resembling a layer cake with brown sandstone strata intermingled with gray and pink.

Sheep Horn Rock is a simple rounded dome. The name comes from the story that many years ago an old man who lived in the park near it owned a flock of sheep. For some reason he fancied bucks, and owned many of them. One was a pet that would jump out of the brush corral before dawn. A ledge behind the face of the monument gave ascent to the top. This buck would climb up to greet the sunrise. Navajo passing near just at dawn could see the dark curved horns of this buck against the graying skyline.

Hosteen Hudson has a good memory of history. He told me many tales of old and recent incidents in the Country of Standing Rocks as we rode to the ancient battlefield.

As the story had been handed down in his clan the battle occurred long before the Navajo entered the South-

west
the
gran
bodi
scen
the
the c
To
arrow
axes,
pick
the
that
foun
bows
gear
in th
Th
are
talke
to th
trudi
with
Ne
touch
skull
have
logic
cliff
Re
of th
said
the
Colo
the c
ing
ously
and
feren
So
certa
great
here.
He
throu
car.
Whe
map
in th
W
as th
a pr
of th
the b
ening
a my
the
purp
ing a
shif
of fl
Time
pictu
deser
So
a co
in th
echo
band
into
from
MA

west. Hosteen Hudson related that at the time of his ever-so-many great grandmother's arrival in the region bodies still lay on the ground at the scene. This had been possible due to the dry, high air which mummified the dead.

Today the area is strewn with many arrow and spear points, and some hand axes, though the younger Navajo have picked up and sold most of these to the nearest trader. Hudson declared that when he was a very small boy he found fragments of shields, arrows, bows, war clubs, leggings and other gear in some of the caves and recesses in the cliffs.

The Navajo said that human bones are still found occasionally. As he talked we dismounted, and he pointed to the sand at my feet. There protruding from the earth was a skull with teeth intact.

Neither Sam nor the old man would touch it. Using a stick I unearthed the skull. In shape it resembled those I have seen many times in the archeological excavations at the prehistoric cliff dwellings in this region.

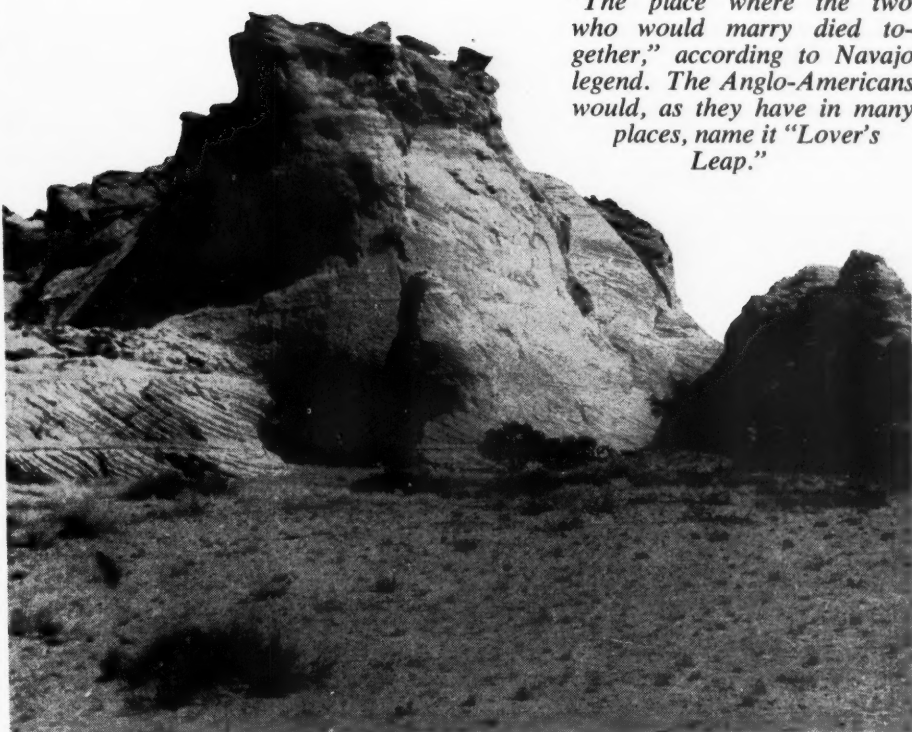
Referring to the Navajo clan story of the ancient battle, Hosteen Hudson said these fighting people came from the direction of the big river (the Colorado). One party was fleeing, the other pursuing. Cornered, the fleeing warriors turned and fought furiously. The fight lasted several days and the few survivors departed in different directions.

So much for Navajo legend. It is certain that at some remote period a great aboriginal battle did take place here.

Hosteen Hudson rode on with us through the Standing Rocks to the car. He would take the horses home. When we dismounted he drew a rough map of the Country of Standing Rocks in the sand with a sharp stick.

We continued toward the north, and as the sun was setting we came out on a promontory that gives a wide view of the area. A purple haze lay about the base of the huge domes. The deepening glow gave the Standing Rocks a mystic beauty they never attain in the sunlight. There are pinks, reds, purples, browns and yellows, shimmering and waving in fantastic glee. The shifting haze gave them an appearance of fluidity—of floating in the Sea of Time. Truly this was an artist's dream picture of the limitless and unknown desert of the high plateaus.

Somewhere in the hidden fastness a coyote babbled eerily. From deep in the Standing Rocks a vagrant breeze echoed the settling down sounds of a band of sheep. Regretfully I got back into the car and pulled myself away from this enchanting dream-world.



"The place where the two who would marry died together," according to Navajo legend. The Anglo-Americans would, as they have in many places, name it "Lover's Leap."

Shadows Make the Picture...

... Prize Contest Announcement

Because of the brilliant lighting and the strong shadows on the desert, this is an ideal area for photographers—for as every good camera hand knows it takes the shadows to make the picture. Each month the Desert Magazine presents two of the best photographs available for reproduction—and to obtain these, offers cash prizes to the photographers who submit them. Needless to say, only desert pictures are eligible for this contest.

Entries for this month's contest must be in the Desert Magazine office, Palm Desert, California, by March 20, and winning prints will appear in the May issue. Pictures which arrive too late for one month's contest are entered in the next. First prize is \$10.00; second prize, \$5.00. For non-winning pictures accepted for publication, \$3.00 each will be paid.

HERE ARE THE RULES

- 1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED WHEN RETURN POSTAGE IS ENCLOSED.
- 4—All entries must be in the Desert Magazine office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. Desert Magazine requires first publication rights only of prize winning pictures.
- 6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.
- 7—Judges will be selected from Desert's editorial staff, and awards will be made immediately after the close of the contest each month.

Address All Entries to Photo Editor

THE *Desert* MAGAZINE
PALM DESERT, CALIFORNIA

Gorgeous Flowering Season is Forecast

THANKS to the rain and snow gods, the 1949 season promises an extravagant display of desert wildflowers such as has not been seen in many years. From all over Arizona, Southern Utah, Nevada and the Mojave and Colorado deserts of California the report is the same: billions of tiny flowering shrubs coming through the sand and around the rocks—such greenery as one sees only four or five times in a generation.

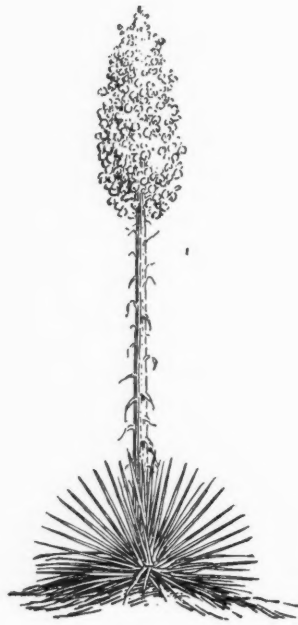
A month ago, in the February issue, *Desert* predicted an early flowering season. But after five weeks of record-breaking low temperatures, the editors must reverse that forecast. The flowering season will be late.

As this forecast goes to press early in February the weather remains cold, and above the 3000-foot level the mountains are covered with the snow that fell early in January. But the ground is full of moisture and the seeds are germinating.

If warm days come by mid-February, then the early-blossoming species on the desert lowlands will be in color by the early days of March. Actually, verbena has been blooming on the Colorado desert and in southern Arizona since December. This lovely purple flower which spreads over the dunes has been hardy enough to stand the freezing weather in January, but warm days will be necessary to bring it to full blossom.

From the Mojave desert Mary Beal writes: "I have never seen better prospects for a good wildflower display. We are anticipating a bumper crop of them in the Daggett area. The ground has been blanketed with snow much of the time since January 9. The little plants started by the fall rains will complete their growth when warm sunshine comes, and many more should sprout in the moist sand."

From Death Valley, Park Naturalist L. Floyd Keller, and George Palmer Putnam at Stovepipe wells concur in the forecast that the display in that area will be much more abundant than normal, but that even on the floor of the valley the blossoms will not appear



until March. Whether it will be early or late in March depends on temperatures between now and then. The most common species in the Death Valley lowlands are phacelia, desert sunflower (geraea), verbena, primrose and scarlet mimulus.

From Trona, on the Mojave, Clark W. Mills writes: "All the old-timers here agree that the display of blossoms this season will be better than any year since 1937. Some time in March, depending on the sunshine, there should be a generous showing of rock asters, coreopsis, blue lupine, owl clover and scores of other species. Most of us think the season will be later than usual."

Sara M. Shenck, writing from Twentynine Palms, predicts that 1949 will be an outstanding flower year. Warm days in February will bring a profusion of dune primroses, sand verbena. In the Dale area there will be desert lilies. In Amboy pass and on the bajadas will be lupine, brown-eyed primrose, yellow-cups. Along most of the roadsides one may expect to see desert mallow, desert dandelion, desert rattlesnake and wooly marigold. In Morongo canyon the ragged rock flower usually blooms in February, but may be late this year. The Devil's garden north of Highway 99 should be yellow with encelia. Some of the phacelias already are in blossom in sheltered spots.

Also writing from Twentynine Palms, Frank R. Givens of the Joshua Tree national monument reports that

all the higher levels were covered with snow early in February, and it is a safe prediction that flowers will be blooming in profusion by the latter part of March.

Myrtle Botts, chairman of the annual wildflower show at Julian, California, is sure the heavy snows now covering the mountains will be followed by an exceptional flowering year.

Arizona

Park Naturalist Louis Shellbach at Grand Canyon is expecting an exceptional flowering year, with some of the blossoms showing deep in the canyon in late February, but on the rim none before March. "I feel the wildflowers will be better and the blooming season longer than normal," he writes.

Julian M. King, writing from Mesa, says conditions are ideal for an exceptional flowering year in that area, but the peak probably will not come before late March.

From the Casa Grande national monument Superintendent A. T. Bicknell believes that warm days in February will produce an excellent display of blossoms in March and April. The outlook for the mountains and the higher levels where snow is still on the ground, is good.

Marvin H. Frost, acting naturalist at Saguaro national monument in southern Arizona, reports: "It is the consensus here that the wildflowers and cacti should put on a better than average display—prospects are far above normal."

The 3.49 inches of rainfall at Tumacacori national monument in southern Arizona is far above normal—"the wettest winter since 1905" according to the old-timers, and Earl Jackson, superintendent of the monument reports that it is too early to forecast the date or extent of the flowering seasons. The ground is full of moisture, but late freezing weather might be damaging.

Nevada

Dora Tucker, librarian at Boulder City, writes that the promise for a good wildflower season is the best since 1940. "We have already had more moisture this year than in all of 1948, and the heavy snowfall that blanketed the ground was a blessing of inestimable value. The dunes and canyons are a matt of tiny plants, and it promises to be a fine year for the botanist, the photographer, and even the rockhound."

Hard Rock Shorty of Death Valley



"Must be pretty dangerous living out here in this wild country," remarked the lady tourist who was sitting on the rickety chair on the porch at Inferno store while her husband changed a tire.

"Yep!" said Hard Rock Shorty as he moved his bench over a few inches to get out of the sun.

"Wont you tell me about some of your experiences?" she asked.

"Ain't much to tell, lady," remarked Shorty.

The woman was persistent. As Shorty lighted his corncob, she prodded him with questions. Finally, he turned to her and said:

"D'ya ever hear about them cloudbursts we have in this country?" "Me and Pisgah Bill would a been drowned in one of 'em if it hadn't been for Bill's quick thinkin'.

"That was 27 years ago next month. We wuz driving a tunnel into the side of the cliff up Eight-ball crick. Follerin' a little seam o' quartz that showed a bit o' gold. Wuz rainin' outside, but me an' Bill didn't think much of it until our burro standin' in the little cave at the entrance began to snort. Then we heard a roarin' noise — way up the wash.

"We knew what that wuz. 'Cloudburst,' yelled Bill as he ran to the tunnel entrance. 'Six foot o' water rollin' down the wash,' he shouted back.

"There wuzn't time to get out. Looked as if me an' Bill 'd be drowned like rats in a hole. But Bill's got a lotta brains, and he sure used 'em that time. We had

a couple of wagon loads o' cement — the quick-settin' kind — stored just inside the entrance.

"'Toss that cement out here,' Bill yelled. So I started tossin' sacks to Bill and he began dumpin' 'em across the entrance, just outside o' where the burro wuz standin'.

"'Faster,' yelled Bill. 'She's gainin' on us.'

"That burro knew what was up, an as fast as I tossed them sacks down on the floor the burro planted itself there and kicked 'em out to Bill. It hardened as quick as Bill dumped it on the wall he wuz buildin'. 'Yes ma'm, we worked two hours like that, jes keeping about three inches above that risin' water. The last sack o' cement sealed 'er tight, an' there we wuz in that tunnel with 20 feet o' water goin' down the wash outside.

An' then the water started fallin' again, and if Bill an' me hadn't had a case o' beans inside that tunnel we'd a starved to death before we picked a hole in that wall so we could get us and the burro outta there again."

Desert Cavalcade . . . 10th Annual Presentation

Calexico, California « » March 17-18-19

A historical pageant featuring the courageous trek of California's first colonists under the leadership of the gallant Juan Bautista de Anza • Gold rush to California • Pony express and freighters • Reclamation of Imperial valley and the disaster that threatened when the Colorado river ran wild in 1905-6-7.

Three days of international fiesta, with two presentations of the Cavalcade Pageant on Friday and Saturday nights, March 18-19 at Cavalcade stadium. Brilliant cast of musicians and dancers from both sides of the border participating in this great historical spectacle.

Calexico Invites You

For seat reservations write Desert Cavalcade, Calexico, California



Visit Our
MONTANA CATTLE RANCH
IN SCENIC CENTRAL MONTANA

Range Riding, Pack Trips to historic gold camps, Fishing, Hunting, Jeep Tours, Fossil Hunts, Float Trips on scenic upper Missouri through geological wonderland by special arrangement. Western Table, Western Hospitality. Limited accommodations.

RESERVATIONS ONLY
PARADISE RANCH
BROOKS, MONTANA

SAN JUANITA LODGE

A Friendly Place to Stop
For a Week or a Month

AT SPECIAL RATES

Superb View—Only 3 Miles East of
Glamorous Palm Springs
The Land of Long Afternoons

Under Owner-Management of Ammy and
Umfrey Johnson and Katherine Gossiaux

ON HIGHWAY 111
PHONE PALM SPRINGS 1178

"EVERYTHING FOR THE HIKER"

SLEEPING BAGS
AIR MATTRESSES
SMALL TENTS

and many other items

VAN DEGRIFT'S HIKE HUT
717 West Seventh Street
LOS ANGELES 14, CALIFORNIA



IN BORREGO VALLEY
The End of the Rainbow Is

TUB CANYON RANCH

Where, for the discriminating buyer, we have a limited number of choice, high level HOME-SITES, in a restricted area.

We invite you to share our Desert Ranch with us. Write or see

NOEL AND RUTH CRICKMER
Borrego, Julian P. O., California
(No Speculators, Please)



'Pegleg Smith' of 1949 . . .

Photo by Gaylord Johnson.

Roy Hicks of Costa Mesa and Desert Hot Springs, California, who, impersonating the legendary Pegleg Smith of the black nuggets fame, won the annual Liar's Contest in Borrego valley on New Year's Eve.

MINES AND MINING . . .

Washington, D. C. . . .

While discoveries of new uranium deposits are being reported from many quarters, the plateau area in western Colorado and eastern Utah remains the major source from which the Atomic Energy Commission is deriving its fissionable ore at the present time, according to John K. Gustafson, raw materials manager for AEC.

The commission is endeavoring to step up its production by means of a 3-point program:

1. Renovation of three wartime "ideal" processing plants for atomic ores at Monticello, San Juan County, Utah, and at Uravan and Durango, Colorado (The Monticello plant will be contract-operated for the government by private industry).

2. Possible construction by private industry of a plant in western Utah to process copper-uranium ores found in Utah and Arizona.

3. Vigorous acceleration of the exploration program, to develop extent of known deposits of carnotite and roscoelite-type vanadium ores containing uranium.

To insure future supply of material, the commission is planning to diamond drill potential fields in western Utah and Nevada. During the drilling program on government land it is withdrawn from entry. This is to prevent speculation, since the commission has offered a bonus of \$10,000 for discovery of new uranium-bearing bodies capable of producing 20 or more tons of material. The commission is now paying \$3.50 a pound for ore that once sold for 35 cents.—*Pioche Record*.

Carson City, Nevada . . .

After seven years of planning and 12 months of actual work, the model mine being installed in the basement of the old U. S. mint building, now a museum, is nearing completion. The visitor will be able to see practically every operation and all the component parts of a modern mine, with 25 dummy miners at work in the various processes. The project is being financed with a \$35,000 donation by Major Max J. Flieschmann and contributions by S. S. Jaksick, Nevada Lumber company, L. H. Kent, Oliver Lumber company and Central Comstock Mines corporation. Work is under the direction of J. E. Green, museum director, and George Smith.—*Pioche Record*.

Washington, D. C. . . .

The Federal Government stock piling program is still active and the following materials are in demand: chrysotile and amosite asbestos, bauxite, beryl, bismuth, cadmium, metallurgical and battery grade manganese, film muscovite, steatite block talc, and zinc. Potential California producers of the above listed materials should submit in letter form an offer quoting a price for the maximum quantity of each grade, type, and size of material which can be delivered to the Government not later than June 30, 1949. Producers are further requested to contact the Treasury Department, Bureau of Federal Supply, Strategic and Critical Materials Branch, Washington 25, D. C., for form TS (SCM) 1803, "Suppliers List Application." This single application is all that is required to place a firm or individual on the list of suppliers for strategic and critical minerals. Specifications covering the above listed materials may be obtained at the above address or may be inspected at the State Division of Mines, Ferry Building, San Francisco.—*California Mineral Information Service*.

Sunnyside, Utah . . .

Utah coal, once regarded as so worthless the mine is reported to have been sold for \$250, has now reached an annual production of 500,000 tons a year, according to Manager R. G. Heers.—*Humboldt Star*.

Salt Lake City . . .

Iron county, Utah, has a potential reserve of 500 million tons of iron ore, according to survey figures made public by the Bureau of Mines. While ore was first mined in southwestern Utah in 1874, large scale operations did not begin until 1923. Since then over 10 million tons have been mined. The ore in the contact veins is generally described as "predominantly magnetite, hard, rich in iron and low in impurities."—*Humboldt Star*.

Salt Lake City . . .

Construction is underway at the site of Kennecott Copper corporation's \$16,000,000 refinery south of Garfield, according to D. D. Moffat, vice president of the corporation. The plant is scheduled to be ready to handle ore by March, 1950, and will have capacity to refine 12,000 tons of copper ore monthly.—*Pioche Record*.

Mesa, Arizona . . .

Near the base of the Superstition mountains where the legendary Lost Dutchman mine is believed to be located, the recently formed Goldfield Mines syndicate is preparing to strip-mine 300 tons of gravel daily. The 81 claims in the property recently were sold by E. H. and L. D. Shumway. The operating syndicate includes Alfred Strong Lewis, Thomas R. Russell, Ted W. Sliger and C. C. Waterbury. After taking off a light overburden, the operators say they will be in gold-bearing conglomerate and brecciated granite which will average \$9 a ton. They estimate the mining cost at \$3.—*Los Angeles Times*.

Goldfield, Nevada . . .

Snow and cold weather virtually have brought a halt to operations at the Deep Mines property. Completion of a 100-ton mill was delayed by the unfavorable weather. The development program is being conducted by Newmont Mining corporation.—*Goldfield News*.

Mines in United States produced \$15,620,000,000 of wealth in 1948 according to the annual report of Secretary J. A. Krug. Gold production was down 10 percent from 1947, and silver up five percent.

Cassius I. (Cash) Cook, widely known throughout the mining world, died at his Kimberly home late in December. He was general manager of the Consolidated Coppermines corporation at Kimberly.

J. P. Hall has been re-elected president of the Western Mining Congress, with Capt. John D. Hubbard of Butte county as secretary.

DESERT INCOME PROPERTY
Four fully furnished cottages and 40 acres overlooking Lucerne Valley, Mojave Desert. Splendid view, 3300 ft. elevation, clear dry air, spring water. In best Guest Ranch area, also opportunity for Rest Home or Sanatorium. 10 miles from Apple Valley.
Ranches - \$21,500, terms - All or Part
WM. E. MILLER
BOX Y, LUCERNE VALLEY, CALIF.

YOU WILL BE PLEASED

With the service and quality of goods you will receive by ordering from the Heart of the Navajo Country.

Navajo Rugs and Saddle Blankets
Genuine Handmade Silver Jewelry
Set With Turquoise
Petrified Wood and Agate Settings—
Made by Indians

Write Me for Prices and Descriptions

E. P. WOODS

Navajo Blankets - Indian Handicraft
Wholesale Distributor
FARMINGTON, NEW MEXICO

LETTERS . . .

Tupelo, Mississippi

Desert:

In answering your Question 16 on the Desert Quiz in the November number of Desert Magazine I checked mesquite as the answer but with the mental reservation that it is not quite correct. Of course *Prosopis odorata*, which produces the screwbeans, is sometimes called screwbean mesquite but to most people mesquite means *Prosopis juliflora*, which produces straight bean pods and not screwbeans.

I presume several dozen people have already called your attention to this almost-a-mistake, and I would not have bothered to write about it except that it gives me a chance to tell you how much I enjoyed the Anniversary November number with its story of the first 11 years of the Magazine. It gives me a special thrill—and also made me homesick for the desert.

W. B. McDOUGALL

NEW FOLDER READY

NOW it's LUCERNE VALLEY, high desert community—center of interesting deposits, near mountains, lakes, fishing, winter sports. Here are all year homesites, egg ranches, alfalfa fields with back drop of majestic peaks. WRITE today for new folder with picture-map, free. ADDRESS Chamber of Commerce LUCERNE VALLEY, San Bernardino Co., Calif.

A PACK TRIP THAT IS DIFFERENT

... For Rockhounds, Photographers, Artists, Geologists, Archeologists, or people seeking an unusual vacation in one of the most colorful and primitive parts of the U. S. Will outfit and guide 23rd pack trip into the little known and spectacular Colorado River section of San Juan County, Utah . . . A section that few have seen, abounding in arches, bridges, cliff dweller ruins, petroglyphs, monuments, desert and canyons.

Trip Starts About Middle of July
Party Limited to 20

ROSS S. MUSSELMAN

1M Ranch Monticello, Utah

Arizona's Fabulous SUPERSTITION MOUNTAINS and the LOST DUTCHMAN GOLD MINE

Await your spring vacation off the beaten path, 27 miles east of Mesa. Small, friendly, informal. Right for outdoor folk! Furnished housekeeping cottages, \$30-\$50 weekly for two. Trail rides in vast unbroken, flowering desert. Pack trips into the Superstition gold country. Chuck wagon dinners, etc.

FREE Folder from

KINGS RANCH RESORT

P. O. Box 151 MESA, ARIZONA

Witching for Water . . .

Eden, California

Desert:

In your February issue C. W. Munson gives reasons for relying on water-witching to get water.

Now a switch will work for me, but after 20 years of water well drilling, I have concluded that good water-witches have about a 50-50 chance of success. I find geology the best guide.

No old experienced driller will risk his own money on the skill of a water-witch, and I have talked to a lot of them. A water driller can go broke, and sometimes does, by risking his money on what the water-witches tell him.

Yet I will give them credit—they do sometimes locate water, but the wet holes generally are 25 feet or less. They do not seem to have any luck on deep water.

One of the most successful water-witches around here told me after I had drilled five or six dry holes on his own place; "It is strange. I can find water for other people, but I can't get water for myself."

It is seldom a water-witch will risk his own money. He will say, "Here it is. If you drill here I will pledge my sacred honor you will get water"—but he will not risk a dollar on it.

Water-witching is the oldest delusion on earth.

F. G. HOSKINS

Black Ants and Foxtail . . .

San Gabriel, California

Desert:

I have been out on the Mojave looking over some mining claims, and it appears to me that this season we are going to have a wildflower display such as occurs only four or five times in a lifetime. I counted 20 different species in a space 20 feet square.

During the 40 years in which I have never missed a trip into the desert country I have seen many interesting things. In 1940 on the Hidden Springs road over Quail mountains we drove up a wash about five miles to where we found the desert literally covered with black ants—billions of them. On the same trip the area was covered with brown foxtail, something I had not seen previously in all the years I had traveled that country. I wonder if Nature in some way associates black ants with foxtail.

FRED EADS

Glyphs at Indian Pass . . .

Santa Monica, California

Desert:

Mr. Weight's remarks in your Feb-

ruary issue about the scratched rocks at Indian Pass were of particular interest to me because this past Christmas I picked up a stone with similar scratches near the sand dunes in Death Valley. I thought at first the marks were sand etchings, but they are not.

Another theory occurred to me. Could the Indians have been trying to clean or sharpen knife blades or arrow tips the same way we sharpen a pencil point on sand paper?

MRS. ALEXIS J. STRONG

. . .

Compton, California

Desert:

As a Trench Rat, I'm sticking my neck way out when I suggest a reason for the trails mentioned by Harold O. Weight in his story, ROCKHOUND TRAIL TO INDIAN PASS, in the February '49 issue of Desert.

Perhaps the desert rats will laugh at my idea, but here it is for what it is worth.

That country is all desert and more than likely was always desert and due to the heat most of the traveling had to be done at night.

It seems logical that the stones were turned over and cleared away from the paths so that they could be followed in the cool of the night. There is usually enough light to follow a trail at night and turning the rocks over would expose a lighter surface that would show at night.

JACK B. MEEHAN

. . .

Flapjacks, Michigan Style . . .

Battle Creek, Michigan

Desert:

I note with interest that Ralph Culver and Jimmie James claim to be quite expert in the art of flipping flapjacks. As far as I am concerned they are just a pair of novices.

Up here in Michigan we have lots of buckwheat and it makes good flapjacks if properly prepared. We mix it with Mexican jumping bean flour and put in a hopper above the stove. When the skillet is hot we just sit at the table and pull a string and enough batter drops into the frying pan for the cakes and the jumping bean flour automatically flips them over. When they are a golden brown they jump out of the skillet and into our plates. We have a hive of honey bees out in the yard and we leave the door open so when they smell the buckwheat cakes they come in and spread honey over the hot-cakes—and boy, are they good!

HARRY PURSELL

HERE AND THERE . . . on the Desert

ARIZONA

Plenty of Pinon Nuts . . .

WINDOW ROCK.—An estimated million pounds of pinon nuts have been marketed this fall by Indians and traders. The crop has been unusual this year because of the early start. Prices have been high because there have been few nuts to market the past few years and the demand has been good. Traders have been getting 25 cents per pound from Gallup dealers, and they in turn have been giving 25 cents in trade or 20 cents in cash to the Indians.—*Holbrook Tribune-News.*

• • •

New Missionary for Navajos . . .

KEAMS CANYON—Rev. Earle Robertson has been appointed missionary to the Navajo, by the American Baptist Home Missionary society. He will be located at the Rainbow mission, Keams Canyon. When Reverend Robertson was pastor at Reedley, California, he did considerable work at the Indian Mission at Dunlap. He and Mrs. Robertson intend to make the Navajo mission their life work.

• • •

Indians Marooned at Grand Canyon

GRAND CANYON—Many Supai Indians are practically marooned on the South Rim of Grand Canyon. They came to the rim early in the winter to gather pinon nuts and to hunt during the deer season. Then heavy snows made the trip back to Supai, deep in Havasu Canyon some 35 miles west of Grand Canyon village, impossible. They are living in hastily constructed hogans. Several families are huddled together in these few temporary structures, which are inadequate for the severe weather. Some are in straitened circumstances due to late pension checks.—*Coconino Sun.*

• • •

Indian Girl Likes College . . .

FLAGSTAFF—Florence Begay, 17-year-old Navajo Indian girl, awarded a national Elks scholarship when a senior at Flagstaff high school, planned to use the scholarship at Sarah Lawrence college, and study to become a doctor. Enroute to New York she was required to sit in the section reserved for colored passengers. She left the bus at Oklahoma City and returned to Flagstaff. Following the advice of her father, Julius Begay, Florence enrolled in Flagstaff college as a pre-medical student.—*Tucson Daily Citizen.*

Advice to Rockhounds . . .

PHOENIX—Practical advice to rockhounds on field trips has been given by A. C. Nebeker, Arizona state mining engineer. "Go out in twos, so many things can happen on the hills and desert. You are looking for minerals, eyes and nose to the ground, and you may lose your bearings. Take a bearing from a prominent point before you start. Be careful not to enter

abandoned mines. People have quite a desire to get into a tunnel without realizing that bad and poisonous gases may be there. Do not trust mine timber. Timber that looks solid may crumble from dry rot when touched. If you want to go down anywhere, have a rope. Look out for rattlesnakes. They are not gentlemen."

—*Goldfield News.*

• • •

Arizona state fish and game commission is planning to build and operate a fish rearing pond about four miles north of the bridge that spans the Colorado river at Blythe and Ehrenberg.



ACROSS FROM PALM VILLAGE—

ADJOINING PALM DESERT—

PANORAMA RANCH enjoys an enviable location in this rapidly growing desert community.

Being developed here are advanced ideas of contemporary desert architecture. The new fireproof STEELITE home is now ready for inspection. Under construction are "Casa Verde," "Vista del Monte" and little "Casita." . . .

One and two-bedroom homes are offered from \$6900. View sites from \$1350 with full club membership.

Special pre-opening discounts still available

**PANORAMA
RANCH** 
PALM DESERT • CALIFORNIA

"PLANNED FOR CASUAL LIVING"

THE DESERT TRADING POST

Classified Advertising in This Section Costs 8c a word, \$1.00 Minimum Per Issue

INDIAN GOODS

SELLING A LIFE TIME collection of material from Indian tribes of North America, Navajo ceremonial, regular and prize rugs, old and modern pottery and baskets. Hopi Kachinas, Fetishes and other museum and historical material. Six highly and Fetish decorated pottery jars where Fetish Kachina gods live. (To the Indian the Fetish is a live spirit fed daily through a round feeding hole in the jar.) They are most Holy of Priesthood Fetishes, one a scalp receptacle. They originated in or before the Pueblo Fifth Period. A book by the Archaeological Institute of America, Government school of American research, illustrates and gives the history and functions as performed by priests, owners of each jar. Three are of the war clan and all show age. Indians risk their lives to guard Holy Fetishes. Address H. A. McHenry, 1282 Summit Ave., Pasadena (3), California. Telephone SYcamore 4-3920.

FOR SALE—Collection of old Indian things, some with real scalp locks. Also five hundred Kachina dolls, one or all. One dollar up. Daniels Indian Trading Post, 401 West Foot-hill Blvd., Fontana, California.

BOOKS—MAGAZINES

URANIUM PROSPECTOR'S Handbook, \$1.00; non-technical, complete, Dept. T., Craft-Connor Publishing Co., 601 S. Vermont, Los Angeles 5, California.

SELLING DESERT MAGAZINES, Dec., 1937, to Dec., 1947, nine binders. \$45.00. 629 North Findlay Ave., Montebello, California.

BOOKFINDERS—Scarce, out of print, unusual books quickly supplied. Send wants. Clifton, Box 1377d, Beverly Hills, California.

OUTDOOR RAMBLER—An outdoor publication that's different. Two years, \$1.00; 60c year; 10c copy. Outdoor Rambler, Box 884, Ione, California.

BUSINESS OPPORTUNITIES

FOR SALE OR LEASE—Nine claims, about 180 acres, 16 miles north of Ludlow, California. Assays show \$3.20 silver a ton, 37.57 percent calcium oxide, 13.39 percent magnesium, 12.5 percent nickel, some radio reaction. Open pit mining proposition, as there is a mountain of it. Address A. G. Ely, 2065 Middlebrook Road, Torrance, California.

REAL ESTATE

BARGAIN—Lot 22, Block A, Gem Village, near Bayfield, Colorado. Make offer. George Wells, 1505 E. Willetta, Phoenix, Arizona.

SERVICE STATION and store at historic Coyote Wells on Highway 80 between El Centro and San Diego for sale by owner. Clean attractive property in one of Southern California's most fascinating desert areas. Painted canyon, coral reefs, fossil beds, old Indian sites and wide variety of mineral deposits within 25-mile radius. Ideal spot for roadside mineral dealer. Electricity and water system with electric pump. Write owner, O. D. Stephens, P. O. Box 812, Seeley, California.

MOUNTAIN CABIN—Nine miles from Lake Tahoe on Highway No. 50, three rooms completely furnished, butane, electricity, private well, road open all winter, 7/10 mile from Echo Lake, a sacrifice sale if made before April 1. Write Ronald L. Johnson, Thermal, California.

1 1/4 ACRES CHOICE LAND in Descanso; three modern rental units, large rock garage or business building, \$10,000—\$2,000 cash, \$150 per month. Choice homesites at Alpine with water developed, productive soil, grand view, healthiest climate in U. S. according to government report. \$850 per acre. Visit Ocotillo in the land of the ocotillos, desert resort and charming virgin desert and mountain area. 27 miles west of El Centro, California, on U. S. Highway 80. Electricity, abundance of pure soft water, business opportunities. Lots \$200, acreage \$100 per acre and up. Send for circular. John C. Chalupnik, Ocotillo, via Plaster City, California.

FOR THAT summer dream home why not in-comparable Lake Tahoe—"The Lake of the Sky"? Crowded living does not exist in BEAUTIFUL TAHOE ESTATES Subdivision among giant pine, cedar and fir, overlooking 24 miles of the bluest water you ever saw with snow-capped peaks beyond. Write for free folder. P. R. Murray, Tahoe Vista, Lake Tahoe, California.

FOR SALE—54 acres in northern San Diego county, 1 mile west of community of Rainbow. 387-ft. frontage on new U. S. Highway No. 395. Excellent motel site. Fine view. Elevation approximately 1050 ft. Pleasant climate. Approximately 40 acres is a secluded hide-away. Price, \$4000. See N. W. Tomlin, agent, corner of Main and Juniper, Fallbrook, Calif., or write owner, R. B. Minton, Route 4, Box 366, Lodi, California.

SUN HOME AT PALM DESERT . . . New, modern, all electric plus fireplace. 1000 sq. ft. on choice lot near school and church. Only \$8950. Carl Henderson, Realtor-Builder, Box 201, Palm Desert, California.

USE THAT MONEY to build now—pay \$250 cash, balance monthly on Ranchito homesites. No well to drill, no pump, tank or tower. Electricity and water mains now in—moderate restrictions. Total prices from \$750, insured title, wide view, near P. O., stores. Write for maps of this All-Year desert foothill tract. Clarke Battelle, Lucerne Valley, California.

DESERT HOT SPRINGS ten miles from Palm Springs, California. Unrestricted lot near pool, \$2000; business lot on Pierson, \$3800; excellent unit site, 4 lots on curved street, about one acre, \$2500. Write owner Box 473, Palm Springs, California.

MISCELLANEOUS

WHOLESALE LOTS, Cactus, Resurrection Plants, Boxed Cactus. Aztec Cactus Co., P. O. Box 833, Presidio, Texas.

GOLD! YOU CAN PAN GOLD—It's easy! Healthy, profitable occupation or hobby. Send for big, illustrated book, "Gold Panning for Profit"—\$1.00. Want some of my genuine California gold? One beautiful nugget, \$1.00. Four nuggets, \$2.00. Other wonderful specimen gold nuggets, \$5 and \$10 each. Desert Jim, 627 Lillian, Stockton, California.

CACTI AND SUCCULENTS—From the deserts of the world. Don-Rita brand. By appointment only. Write us your needs and we will try to help you. Michael Donnelly Cacti Gardens, 334 Lowell St., Daly City, California.

LEARN the profitable jewelry and goldsmithing trade at home. Simplified course teaches jewelry designing, manufacture and repairing; gemsetting, etc. Gemcrafters, Dept. F., Kalispell, Montana.

FRED AND JESSIE PORTER welcome you to the "Pow-Wow" Trading Post, Vermo, 14 miles east of Bartow, Highway 91. Rocks! Rocks! Rocks! Rocks in the rough, slabbed, preforms and cabochons. Fluorescent and rare specimens. Caledonite, Linerite, Benitoite, Neptunite and many others. See your own cut. Gifts and Souvenirs.

COLOR SLIDES—Travel, Nature, Geology, etc. Free list (with sample 30c, three for dollar). Kelly D. Choda, Box 5, Los Alamos, New Mexico.

FOR SALE—Karakul wool bed blankets, colors, blue, green, natural and maroon. Money back guarantee. Price \$17.50. Write Addis Kelley, 4637 E. 52nd Place, Maywood, California.

PANNING GOLD—Another hobby for Rock-hounds and Desert Roamers. Know how to pan gold, where to look for it and be able to recognize valuable quartz ledges. The places you go are where rich virgin ground is found. Two instruction booklets 25c or send your name for free literature and catalogue of mining books and supplies for beginners. Old Prospector, Box 21-B222, Dutch Flat, California.

KARAKULS—Producers of Persian Lamb fur are easy to raise, adaptable to any climate or altitude. For further information write Addis Kelley, 4637 E. 52nd Place, Maywood, California.

METEORITES WANTED, iron or stone, highest prices. Stuart Perry, Adrian, Michigan.

GEOLOGIC AND SCENIC Color slides for Educational Entertainment. Catalog Free. Heald Robinson, Dept. 2, 112 E. Lemon Ave., Monrovia, California.

LOST DUTCHMAN GOLD MINE country of famous Superstition Mountains can be reached easily and economically by King's Ranch pack train. Our specialty is packing and horseback trips into Superstitions for prospecting, photography, geological or mineralogical study, or just plain fun. One to five-day guided trips or we'll pack you to and from your own camp. Fine housekeeping cottages at the ranch, \$30 and \$50 per week. Write Julian King, Kings Ranch Resort, Box 151, Mesa, Arizona.

CASH PAID for old gold. Mail old jewelry, watch cases, optical scrap, dental gold—for prompt estimate to Kathryn A. Ross, Henry Field Jewelry Dept., Shenandoah, Iowa.

EARTHWORM BREEDING—Valuable bulletins on successful methods mailed free. Earth-master Publications, Dept. 11, Sun Valley, California.

HAVE 2 D. C. MOTORS, one 1/4 H. P., one 3/4 H. P., both in perfect condition. Will exchange for a good cut-off saw or good cabochon stones, no freaks. Samuel Steinlauf, 759 State Street, Bridgeport 4, Conn.

Navajos Would Mine Uranium . . .

WINDOW ROCK—The Navajo Indians, at their tribal council recently, considered a resolution which would give them a priority right in obtaining permits for prospecting for mineral on their tribal lands. It would also extend to the members of the tribe the right to obtain leases on their claims which could be transferred to mining companies for development.—*Times-Independent*.

• • •

Neighbors That Are Neighbors . . .

YUMA—When John Snyder of Pennsylvania learned that veterans were going to homestead in the Yuma valley, he lost no time filing an application. His farm proved to be a tangle of mesquite trees and brush. He rented equipment but faced a seemingly hopeless task. Then Yuma farmers formed an "Operation America." Nearly 100 persons with machinery moved in and completely transformed the 90-acre ranch within a week.—*Yuma Daily Sun*.

• • •

Publication of Dr. Emil W. Haury's archaeological finds in Arizona's Ventana Cave has been assured by a \$2000 grant from the Viking Fund, Inc., New York philanthropic organization. Dr. Haury, head of the University of Arizona department of Anthropology, started work on Ventana Cave in 1941. The cave is located 75 miles southwest of Tucson. Ancient pottery and other remains found there, are estimated between 10,000 and 20,000 years old.

President Truman has asked Congress to double last year's appropriation for the National Park Service. Most of the increase is to be used for the construction of roads and trails, parkways and physical improvements in the 26 national parks and 154 other areas administered by the Park Service.

A resolution requesting that citrus growers be granted a two-year moratorium on land mortgage payments because of heavy damage to crops during the recent storms was presented to the directors of the Maricopa Farm Bureau Federation. The Bureau adopted the resolution and asked that proper authority grant the moratorium.

"The Salome Desert Sun" is the name of Salome's new newspaper. Editor of the paper is Art Cole, Salome businessman. Perhaps there are still some residents of northern Yuma county who remember the *Salome Sun* edited by Dick Wick Hall in the early days. Hall gave his readers many a laugh.

CALIFORNIA

Forage Fish Needed . . .

COACHELLA—A. C. Taft, chief of the State Bureau of Fish and Game Conservation, announced that a short time ago an attempt was made to bring an airplane load of anchovies from the Gulf of California near Guaymas to Salton Sea but the greater part of the load perished enroute. A second attempt was more successful. Says Taft, "It would not be worthwhile to try and introduce game fish until a forage fish has been established." Found in the sea at present are only two fish species of any size, the mullet and the tarpon, the so-called ten-pounder. The mullet is not a bait-taking fish and the tarpon is extremely scarce. — *Desert Barnacle*.

Campers Must Pay Fee . . .

INYO — National Forest Service headquarters has requested all regional foresters to put a representative group of camp, picnic and winter sports areas on a charge basis at the beginning of the 1949 vacation season, to determine whether recreational forests should pay part of their own way. This year's experiment will embrace 10 heavily-used camp and picnic areas out of a total 1100 on national forests in California. The schedule of charges is as follows: Camping—50 cents daily per car party of not more than six persons, or \$3 per week. For parties of more than six persons an additional 10 cents daily per person of all above six, but no charge for minors under 12 years; Pic-

nicking—25 cents to 50 cents for party of not more than six per day. Five to 10 cents extra for each person above six but no charge for minors under 12. The proposed charges will be for the use of facilities and not for entrance to national forests. Many small camps and picnic areas will be free.—*Inyo Independent*.

Death Takes Pioneer . . .

SILVER LAKE—Roy "Pop" Carson, who started Carson's Camp at Silver Lake in 1917, passed away January 7. Carson's Camp was operated until 1939. Carson was an active developer of the June Lake loop and much of the Mono back country. A superb mineral and gem collection, re-

ONLY ONE WORLD FAMOUS

Valerie Jean Date Shop

Our story of "QUALITY PRODUCTS ONLY" told and retold in largest periodicals all over the world. Send a trial order for THE DE LUXE ASSORTMENT of finest dates and desert delicacies.

1 pound delivered.....\$1.30 3 pounds delivered.....\$3.50

Order from VALERIE JEAN With Confidence

Write for Complete Folder

THERMAL, CALIFORNIA

Enjoy

DESERT LIFE

at Palm Village

NEAR PALM SPRINGS, CALIF.



LIVE A LIFE OF CONSTANT ENJOYMENT AT PALM VILLAGE IN THE SUN DRENCHED, UNSPOILED DESERT.

SWIM in a glamorous pool.

PLAY tennis, badminton, golf.

HORSEBACK rides up the trails of the palm studded canyons.

HIKES to the Cathedral-like date gardens.

TRIPS to the snow capped mountains in 30 minutes.

PICNIC on the shores of the Salton Sea 40 miles away.

ENJOY night club life at Palm Springs.

SHOP at Palm Village shops.

BUSINESS OPPORTUNITIES AWAIT YOU HERE

WRITE for descriptive circular picturing \$1,000,000 improvements.

LOTS START AT \$795.

PALM VILLAGE Desert Homes

P. O. BOX DD, PALM SPRINGS, CALIFORNIA

sulting from many hikes throughout the Inyo-Mono area, was presented to the California Institute of Technology by Carson a few years ago.—*Inyo Register*.

Grow Castor Beans . . .

BRAWLEY—As the result of development of a practical mechanical harvester, the growing of castor seed or beans may soon be added to the long list of Imperial valley cash crops. Plantings have been made over the last two years in the Brawley area and

that seed suited to the valley is now available. Plantings indicate that growers can count on minimum yields of from 1500 to 3000 pounds of seed per acre on good land with early spring planting. The Baker Castor Oil company, Los Angeles, guarantees a floor price of \$150 per ton.—*Imperial Valley Weekly*.

King-sized dates are being developed in Coachella valley. The Medjool dates, according to Ben T. Laflin of Thermal, are larger, they ripen earlier, and they are more resistant to rain

damage than the valley's well-known Deglet Noors. The original Medjool varieties were brought to this country in 1927 by Dr. Walter Swingle, then head of the U. S. Date Gardens in Indio. Dr. Swingle obtained the offshoots from a garden in Morocco.

After 36 years, Lucerne valley has just inaugurated its first valley mail delivery service. Stewart Lull, veteran, was awarded the bid route and started the first delivery run on January 3. His route covers 48 miles and serves over 100 families.

They may not be as fast as Whirlaway but Riverside County Fair and National Date festival will have four dromedary camels fresh from Algiers—next summer. The County Board of Supervisors authorized the purchase. The quartet, technically known as *camelus dromedarius*, will be permanently quartered at the fairgrounds.

Tracts of land within the Palm Springs city limits valued in the millions of dollars will go to the Agua Caliente Indians, making them the richest tribe in the nation. Made in compliance with a 1947 Supreme Court decision, the allotments will be granted under a 1927 schedule if the action gains approval of the Secretary of the Interior.

NEVADA

Visitors Must Be Careful . . .

BOULDER CITY—In the opinion of Geo. F. Baggeley, National Park Service superintendent, the eight persons who drowned in Lake Mead and the Colorado river during 1948 would yet be alive had they followed the basic rules of safety and good judgment. The 1948 death toll is the greatest on record. The eight drownings, two in the lake and six in the river occurred within the boundaries of the Lake Mead Recreational area, which Baggeley administers. In view of the increasing trek of tourists to the area, Park Service Official Baggeley urges fishermen, boatmen, swimmers and all recreationists to preach and practice the following basic rules of safety: Always leave word as to when and where you are going and when you expect to return. This information will aid rescue parties in the event you are missing. Don't attempt to navigate in rough water. Get in a sheltered cove and wait for the wind to quiet. Don't stand up in a boat. Equip your boat with air tanks or a life preserver for each person on board. Carry day and night flares for use in emergency when help is needed. Don't swim in undesignated places.—*Tombstone Epitaph*.

COUNTY MAPS

For Schools, Hunters, Fishermen, Public Offices, and Travelers

CALIF.: with Twnshp., Rng., Sec., Mines, Roads, Trails, Streams, Lakes, R. R., Schools, Rngr. Sta., Elev., Nat. Forest, Pwr. Lines, Canals, Boundaries, etc.

Sizes: 20x30 to 73x100 Inches

Alameda, Alpine, Amador, Butte, Calaveras, Colusa, Contra Costa, Del Norte, El Dorado, Glenn, Kings, Lake, Marin, Mariposa, Merced, Napa, Nevada, Orange, Sacramento, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Santa Cruz, Sierra, Solano, Sonoma, Stanislaus, Sutter, Ventura, Yolo, Yuba—each \$1.

Tuolumne, Santa Barbara, Plumas, Placer, Modoc, Madera—\$1.50.
Tulare, Tehama, Imperial—each \$2.
San Diego, Mendocino, Humboldt—\$2.50.
Trinity, Shasta, Mono, San Luis Obispo, Monterey, Lassen—\$3.

Fresno, Kern, Riverside—\$2.50 - \$5.
Los Angeles—\$1 and \$3.
Siskiyou—\$2 and \$4.

Inyo County, \$15; E or W ½ \$7.50; San Bernardino, 73x110, \$15; No. or So. ½ \$7.50; NW., SW., NE., or SE ¼, \$3.75.

Also Oregon, Idaho and Washington County Maps

WORLD'S MINERALS

2417 San Pablo Avenue — Templebar 2-3870
OAKLAND 12, CALIFORNIA



SUN—DAYS

EVERY DAY AT AMERICA'S MOST DISTINGUISHED RESORT HOTEL; 35-ACRE GARDEN ESTATE, SWIMMING POOL AND ALL SPORTS, BUNGALOWS AND SUITES, AMERICAN PLAN

FORTIETH SEASON UNDER ORIGINAL OWNERSHIP AND MANAGEMENT OF HELLIE COFFMAN, EARL COFFMAN AND GEORGE ROBERSON.

RESERVATIONS EASIER BEFORE CHRISTMAS AND AFTER EASTER.

PALM SPRINGS, CALIFORNIA

"Athens of America" . . .

RHYOLITE—"Rhyolite has spoiled me for other ghost towns," says Edward Weston, internationally known photographer of Carmel, California. "With its picturesque ruins it might rightly be termed 'The Athens of America.'"—*Goldfield News*. . . .

Hoover Dam Popular . . .

BOULDER CITY—C. P. Christensen, Director of Power of the Boulder Canyon project, announced 407,980 visitors to Hoover Dam during 1948. This total established a near record for any one year, being surpassed only by the 1947 figure. The past year's totals raised the number of visitors to 2,902,551 since guide service facilities were established in 1937. No visitors were admitted between December '41 and September, '45. —*Mohave County Miner*. . . .

Building Plans Revealed . . .

CARSON CITY—The State planning board has revealed a building program for the next two years, calling for nearly \$4,000,000 worth of construction. Leading projects will be: a new highway building in Carson City; a life science building at the University of Nevada in Reno; a third story to the present cell block and a death house at the Nevada state prison; additional funds for the University of Nevada heating plant project; a kitchen, commissary, dining room, and bakery at the Nevada mental hospital in Sparks; completion of a second unit to the male ward building at the Nevada mental hospital; three cottages at the Nevada orphans home in Carson City; personnel quarters at the mental hospital; an addition to the supreme court and state library building in Carson City; a new laundry at the state mental hospital; a state office building in Las Vegas, and improvements to the state industrial school at Elko. These projects will be financed by general and outside funds.—*Humboldt Star*. . . .

McCleary Holdings Increased . . .

HUMBOLDT—H. McCleary Timber Company in Humboldt county has purchased 84,459 acres from the Southern Pacific Land company. This tract is bounded on the east by the summit of the Osgood mountains, on the west by lower Paradise valley, on the south by the Western Pacific railroad tracks and on the north by the 20-mile limit. The land lying in the Bloody Run area was described as first class summer range and good winter range. This latest acquisition brings McCleary's land holdings to 144,416 acres.—*Humboldt Star*.

Wheat Scattered for Birds . . .

FALLON—Over four tons of wheat has been scattered in Churchill county by local sportsmen in an effort to keep starving waterfowl, quail and pheasant alive. The birds, hard pressed for feed because of the heavy snow and cold, have been concentrating in large groups all over the county.—*Fallon Standard*. . . .

The development of organized boating and recreational area for Lake Lahontan is under serious consideration. A boating club has been tentatively organized, pending word from the Bureau of Reclamation regional office as to rules and regulations. . . .

More early Nevada journalists will be honored this winter by election to the Nevada Hall of Fame in the Journalism building at the University of Nevada. They will be chosen by Nevada state newspapermen and will be announced at the annual meeting of the Nevada State Press Association in Las Vegas, February 26. Already in the Hall of Fame are three leading journalists of Nevada's beginning days—Mark Twain, Dan Deuille, Sam Davis. . . .

Gabb is preparing for big industrial expansion in 1949. Basic Refractories, heaviest shipper of brucite ores in the world, has been granted a two-year lease on the Gabbs townsite and all facilities. The understanding is that when the lease expires, Basic Refractories will purchase the townsite outright. As early as possible construction will commence on a plant for the manufacture of a special cement.

The secretary of the interior has signed a three-way agreement making a 200,000-acre public shooting area and gamebird refuge in the Stillwater area a reality. The agreement involves the Truckees-Carson irrigation district, the Nevada fish and wildlife service. . . .

Fred Farnsworth and Wayne Cole, mining operators in the Ely area have taken over the old Reville lead mine on a bond and option. According to former owner Madison Locke, three 50-ton shipments averaging \$40 per ton in lead and silver values were trucked to a Utah smelter before the first of the year from dumps on the property. The Ely men plan a program of active development work as soon as underway rehabilitation is completed.

Permanent Gold
embossed binders for

DESERT

These easy-to-insert binders are made especially for Desert Magazine readers who want to preserve the maps and other travel information for future use.

They open flat, and each binder has space for 12 magazines.

Mailed postpaid for
\$1.50

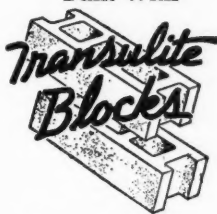
THE *Desert* MAGAZINE
Palm Desert, Calif.

HERE'S MORE HOUSE ... FOR YOUR MONEY



HOMES of DISTINCTION

Built With



SYcamore 3-8133

Call for Estimates — Plans Available

Investigate now. Year 'round comfort, low heating costs. Cool in summer. Low cost maintenance. Build with "Precision Built" concrete, pumice of red cinder blocks. Desert cinder blocks for desert homes.

TRANSIT MIXED CONCRETE CO.

3464 E. Foothill Blvd., Pasadena 8, California

RYan 1-6329

ATlantic 2-5104

UTAH

White Man's World . . .

SALT LAKE CITY—The tribal council of the Northwest Shoshone Indians held a powwow in the Hotel Utah to discuss best methods of getting along in a world now run by the white man. Chief Enos Pubigee and James J. Neaman, assistant tribal chief, pondered the fact that not a single Shoshone owns land within the 15,000,000 acres of Box Elder county area, once owned by Shoshones. The Shoshones have pending before federal court in Washington, D. C., a suit asking for the long-due recompense promised them in the treaty of 1863,

when whites took over their hunting and grazing lands. They believe the Utah board of education should take over teaching of Indian children, and they want payment for lost lands.—*Salt Lake Tribune*.

• • •

Dream Becomes Plan . . .

VERNAL—Plans for the development of a quarry at Dinosaur National Monument for the exploration of a fossil bearing ledge will culminate a dream long talked of and waited for. National park service is endeavoring to secure funds to carry out the project. Arrangements will be made whereby visitors can watch the work without interfering with the workmen. The final stage of the dream will be the construction of a museum. This dinosaur museum will have for its north wall the actual quarry ledge. There are two general units in Dinosaur National Monument, near Vernal. One is the fossil quarry. The second unit comprises the plateaus and canyons of the Green and Yampa rivers. Classic examples of faulting, folding and erosion are exposed in these canyons. This area of the Lodore and Yampa was added to the original eight-acre tract of dinosaur fossil quarry in 1938, increasing the total size of the monument to 209,744 acres.—*Vernal Express*.

• • •

School for Navajos . . .

BRIGHAM CITY—A bill to transfer the Bushnell Hospital property with its 108 permanent buildings from the War Assets Administration to the Interior Department for the purpose of providing a vocational school for the Navajo Indians has been introduced by Senator Watkins of Utah. Bushnell is located at Brigham City, about one day's bus ride north of the Navajo reservation.—*Salt Lake Tribune*.

• • •

Deer Herd Snowbound . . .

BINGHAM—More than 200 hungry deer were isolated in Dry Fork canyon between Copperton and Bingham, when storms and drifting snow buried their food supply. A Salt Lake

county deputy sheriff, Bingham's police chief and two newsmen participated in clearing a path into the canyon and providing feed. At the first sound of the caterpillar plow the deer made a pitiful attempt to flee. While the cat cleared paths in the canyon floor, bales of hay were deposited at intervals. The more inquisitive and hungry moved in to investigate. When they learned there was a combination of hay and salt, the word seemed to get around by deer language and the entire herd began to eat.—*Salt Lake Tribune*.

• • •

Navajos Work Well . . .

GARLAND—Wilford Y. Cannon, production manager, Utah-Idaho Sugar Co., stated that 900 Navajos, with their wives and children, had worked in spring beet fields in Sanpete, Sevier, Millard and Iron county, and 125 had been employed in Box Elder county. Although often referred to as a nomad race, because of their custom of moving hogans to follow livestock, the Navajos are equally skilled with cultivation of their own corn and squash gardens, and pitched into the arduous beet cultivation work with energy. The Navajo Indian likes to eat his own wife's cooking. He wants his papooses within yelling distance, and he can't bear to be absent from the cliff and desert lands of his home hogan more than two or three months at the most. Given this domestic serenity, the Navajo is a contented and willing worker, Utah and Nevada growers and intermountain industry have discovered.—*Salt Lake Tribune*.

• • •

Strict Tagging of Holiday Trees . . .

SALT LAKE CITY—The state board of forestry and fire control has the authority to control tagging of Christmas trees, but needs to improve administration of its program; according to John E. Burt, deputy state forester. The method of tagging trees is outmoded and in view of the heightened demand, should be improved. Approximately 30 percent of an estimated 150,000 trees offered for sale in Utah during the pre-Christmas season were wasted. Burt suggested that it be made mandatory that trees be tagged on the site as they are loaded. Under this plan, untagged trees could be confiscated en route to market with owners and haulers held liable.—*Salt Lake Tribune*.

• • •

Utah's Newest Town . . .

KEARNS—Kearns, once an army camp of hugh proportions, is now being converted to peacetime use and will become Utah's newest town. Kearns is a fenced-in ghost town drowsing on the windy flats 17 miles

Miracle in the Desert

- Oriental Carpet of Wildflowers.
- Green Gold Production of \$95,000,000 in Choice Field Crops, Vegetables, Blue Ribbon Fruits, Livestock and Poultry.
- Glittering Mineral and Semi-Precious Stone Display.
- '49er Celebration in Costume.
- Horse Racing and Horse Shows.
- Spectacular Vaudeville.
- Atomic Age Machinery Exhibits—

All Shown at the

California Mid-Winter Fair

February 26 - March 6

AT IMPERIAL, CALIFORNIA

(Accommodations at El Centro, Imperial, Brawley, Calexico)

SLEEP IN YOUR CAR . . .



CALIFORNIA CAR BED

Transferable luxurious, air-foam inner-spring unit converts your car to a double bed.

1-3 hours to install. No Cutting.

Now Available . . .

CUSTOM CRUISING SEAT . . .

Marvelous new dual front seats converting at a fingertouch to single OR double bed, reclining chairs, or chaise longue. An emergency ambulance, ideal for the tourist. Featured in Newsweek, June 21, P. 73. Write for Brochure "F."

CALIFORNIA CAR BED COMPANY

2725 W. 54th St., Los Angeles 43

AXminster 34700

south of Salt Lake City. No one lives there. Yet, its 1200-acre area is crisscrossed by splendid paved roads. In the ground under Kearns is buried a water and sewage system capable of serving from 30,000 to 70,000 persons, and overhead is a complete electrical distribution network. At the end of the war Kearns was classified as "05" by the War Assets Administration which meant that the buildings and utilities were to be salvaged for off-site use and the land returned to its previous use. This decision brought a storm of protests with the result that the site was set aside as a townsite and offered for sale. Standard Surplus, Inc., was the successful bidder. An 18 million dollar improvement is now under way. Immediate plans call for the construction of 500 homes during the first year. Eventually 2500 homes or more will be built on the new townsite.—*Times Independent*.

NEW MEXICO

Advisors for the Indians . . .

Secretary of Interior J. A. Krug has announced the appointment of a National Advisory Committee on Indian Affairs to advise and consult with him and officials of the Bureau of Indian Affairs on administrative policies relating to the Indians. The following persons, representing various organizations, scientific groups, or regions interested in the Indians, have accepted membership on the committee: Mark A. Dawber, executive secretary, Home Missions Council of North America, New York City; Oliver LaFarge, president, Association on American Indian Affairs, Santa Fe; Jonathan M. Steere, president, Indian Rights Association, Philadelphia; Ruth M. Bronson, executive secretary, National Congress of American Indians, Washington, D. C.; E. P. Carville, former governor and senator of Nevada; W. Carson Ryan, University of North Carolina, Chapel Hill, North Carolina; Clyde Kluckhohn, Department of Anthropology, Harvard University; Roland R. Renne, president, Montana State College, Bozeman; Ruth Kirk, chairman, Indian committee, General Federation of Womens Clubs, Gallup; Barry Goldwater, Goldwater Department Store, Phoenix, Arizona.

Indian Health Program . . .

GALLUP—A proposal that the United States public health service take over the entire Indian health program was advanced at the convention of the Association of State and Territorial Health officers in Washing-

ton. Indian bureau officials asked a study of the program as it is administered by the bureau.—*Gallup Independent*.

Fresh at the Finish . . .

EL PASO, Texas—A short swarthy Indian marathon runner completed a 230-mile grind in 44 hours and 57 minutes elapsed time then plodded across the international bridge from Mexico to El Paso to touch off the 14th annual Southwestern Sun carnival with a blazing torch. Pedro Paseno, 35-year-old hero of a tribe of Mexican cave-dwelling Indians, was the only one of nine members of his Tarahumara tribesmen to last out the gruelling endurance contest afoot. The bronzed, 140-pound Paseno finished with such a burst of speed that he caught Sun Carnival officials unprepared to welcome him. He wore only

a flat leather sandal, tied to his ankles by thongs, and aside from bruised blistered feet showed little the worse for his torturous journey from Chihuahua City. "I could have run four more hours," he told Dr. Zingg. Dr. Robert Zingg, Harvard anthropologist who lived among the primitive Tarahumar-

SAN JUAN RIVER BOAT TRIPS

Bluff or Mexican Hat, Utah, to Lee's Ferry
Eight-Day Trip Amid the Scenic Canyons
of Southern Utah

Visit Rainbow Bridge
and Other Points of Interest in This
Magnificent Canyon Country

Write for Rates and Full Information

CHARLES LARABEE
Encinitas, California

Rare Cactus Candy

made from the heart of the Visnaga
cactus of our Southwestern desert -

gift boxed in quaint
Mexican casseroles
at \$1.95 \$2.95 \$5.95
Shipped prepaid.

the Sweet mart
615 B san diego, california



Lovely TWIN PALMS at Palm Desert



In a scenic Wonderland in the heart of the Date Empire, 12 miles east of Palm Springs. Ten minute walk to the fabulous Shadow Mountain Club for swimming, tennis, etc. Twenty-five minute drive to the Salton Sea for duck hunting and boating. One and two-bedroom suites complete with living room, kitchen and dinette. Private patio. Write or 'phone for reservations now for winter vacation.

Post Office Box 2, PALM DESERT, CALIFORNIA
Telephone Indio 76231

ROBERT C. AND FLORENCE STURGEON, Managing Owners
Come on Out WHERE SUMMER SPENDS THE WINTER

ans for several months, accompanied the runners by truck. —*Salt Lake Tribune.*

He Lived 111 Years ...

LAS CRUCES—Tibursio Maruffo, one of the oldest residents of the United States, passed away January 9. Maruffo was born in Carrical, Chihuahua, Mexico, August 11, 1837—111 years ago. He had lived more than 100 years in Dona Ana county having arrived there at the age of 10. Although no authenticated documents are available as proof of his age, his two sons, Esteban, 48, and Evangelisto, 51, said that from boyhood he had impressed his birthdate upon their memory. —*Las Cruces.*

Indians Snubbed ...

GALLUP—The states of New Mexico and Arizona can offer no justification for their wilful evasion in denying 100,000 American Indian citizens their social security benefits.

The executive board of the Association on American Indian Affairs issued a strongly-worded petition to President Truman, Secretary of the Interior Krug, and Federal Security Administrator Ewing, asking immediate executive action. The petition charges that the destitution and suffering of the Indian people, calling for emergency relief and private charity, is the result of 14 years denial to them of this normal public assistance. —*Gallup Gazette.*

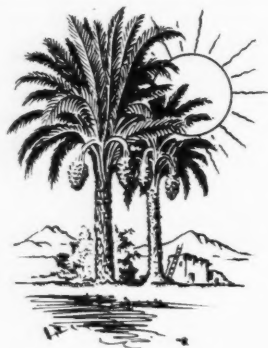
Breeding Farm for Game Birds

CARLSBAD—James Cox, superintendent of the state game farm, reports the capacity of the farm is about 10,000 birds yearly, and could be increased to 20,000 without much expense. Quail, pheasant and partridge are the chief product of the farm. About 88 percent of all pheasant eggs and 71 percent of quail eggs incubated, hatch. After the birds are hatched they are taught to eat, kept in brooder

three weeks, then turned into 'runs' or grain fields. During the summer months egg gathering must be done frequently as exposure to the hot sun will ruin the egg for hatching purposes. Birds are stocked where past experience indicate they will do well. Bob White quail, plentiful at one time, is now scarce because of drouth conditions. Blue quail do very well but are hard to stock as they prosper in a 60,000 square mile area. All birds released are banded and the game department has asked cooperation of hunters in reporting birds killed with bands so that they can check the progress of their program. —*Eddy County News.*

Huge Corralitos Ranch, 15 miles west of Las Cruces, has been sold. The ranch, formerly owned by Harvey S. Bissell, has been purchased by Tom Hall, W. O. Hall, and Frank Archer, all of Hatch. The deal represents one of the largest ranch sales in southern New Mexico in some years.

The Gallup town board may ask Congress to repeal the Indian liquor prohibition law. Members of the board expressed belief that legalization of sales to Indians would help eliminate bootlegging and permit better control of the local liquor situation. No formal action has been taken. Board members indicated they would be interested in expressions of public sentiment on the proposal.



STUFFED DATES

MOIST CALIFORNIA DATES

Stuffed with delicious divinity. Topped with a pecan or walnut half.

Delicious and Nutricious

1-lb. Box, delivered in U. S.	\$1.35
2-lb. Box, delivered in U. S.	2.55
3-lb. Box, delivered in U. S.	3.75

Wisteria Candy Cottage
BOULEVARD, CALIFORNIA

BY BOAT

into the heart of
the Southwest's
most scenic canyon country with

Norman Nevills

A limited number of reservations are now being made for the 1949 Nevills expeditions down the San Juan and Colorado rivers—191 miles in seven days. Special-built river boats, skilled boatmen, good food and sleeping bags for all passengers.

Boats start from Mexican Hat, Utah, on the San Juan, and complete the trip at Lee's Ferry on the Colorado. Arrangements will be made to have your car driven from Mexican Hat to Lee's Ferry. Sidetrips include:

Crossing of the Fathers, Music Temple, Mystery, Twilight and Hidden Passage Canyons, Outlaw Cave, and the Famous Rainbow Bridge

For Schedules and Rates Write to . . .

NORMAN NEVILLS — — — — BLUFF, UTAH

"... A river trip with Norman Nevills is more than a mere boat ride. It is a flight on a magic carpet of adventure into a canyon wilderness of indescribable beauty and grandeur."

—DESERT MAGAZINE

PRINTERS for the desert SOUTHWEST

We will gladly furnish samples and estimates on the printing of your—

- Guest ranch brochures
- Catalogs and price lists
- Office and personal stationery
- Announcements and invitations
- Mail order forms
- Booklets, menus, office forms, cards, checks, receipts.
- Art work and engraving service

Desert Magazine Press
Palm Desert, California

DESERT CLOSE-UPS

Godfrey Sykes, veteran of the Southwest, whose autobiography, *A Western Trend*, is a vivid cross-section of life and development in the Arizona desert for the last half century, died at his Tucson home December 23. Sykes knew the lower Colorado river and delta probably better than any man in this generation, and in former years was a field scientist for the Desert Laboratory at Tucson. Sykes has written several reminiscent articles for *Desert Magazine*, and one of his stories is now awaiting publication. His passing robs the desert country of one of its most stalwart pioneers.

Only a westerner with an intimate knowledge of the Navajo Indians could write such a story as Toney Richardson's *Country of the Standing Rocks* in this issue of *Desert Magazine*. Toney comes from a family of Indian traders, and practically grew up in a trading post. He speaks Navajo well and enjoys the confidence of the Indians. His home is in Flagstaff, Arizona, and he has written 40-odd fiction books, most of them published in England.

Don Ingalls, whose field trip story this month outlines another interesting destination for members of the rock-hound fraternity, is a member of the Los Angeles police force, being editor of the department's magazine.

Don lived in Phoenix before he moved to Los Angeles, and has spent 20 of his 30 years exploring the desert country, having climbed most of the mountains and trekked up all the larger canyons in the Death Valley area. Once he spent three weeks in Arizona's Superstition mountains, and two weeks in the badlands north of Taos, New Mexico.

He spent two years at George Washington university and another two at the University of Southern California where he majored in journalism and English. Like many other journalists, Don is working on a book. Yes, it is about the desert.

Norton Allen, who has been drawing *Desert's* field trip maps since the magazine was started, is spending the winter in a trailer at Gila Bend, Arizona, where he divides his time between his drawing board and archeological expeditions. His home is El Cajon, California.

DESERT QUIZ

How wise are you in the lore, the geography, the history, the natural sciences of the desert? Here is an opportunity to answer that question for yourself. These 20 questions are based partly on practical acquaintance with the desert Southwest, and partly on the knowledge that comes from reading. The test covers a wide field of subjects and if you answer 50 percent of the questions correctly you are better informed than the average person. A score of 14 to 16 is excellent, and it is a rare student who will get 18. Answers are on page 47.

- 1—The most common ingredient of the sand generally found in the desert arroyos is: Quartz..... Manganese..... Gypsum..... Limestone.....
- 2—The astronomical name for the north star is: Venus..... Jupiter..... Polaris..... Mars.....
- 3—The main dam which stores the water for Salt river valley farmers in Arizona was named in honor of: Coolidge..... Teddy Roosevelt..... Hoover..... Wilson.....
- 4—Javelina is a Spanish word commonly used in the Southwest for: A spear-like weapon used by the Cocopah Indians..... Species of wild hog found in southern Arizona..... Birds that nest in fissures in the rocks..... Member of the lizard family.....
- 5—Joshua trees belong to the botanical family of: Palm..... Cacti..... Conifer..... Lily.....
- 6—Name of the frontiersman who established a stage line across the Southern California desert to the La Paz gold fields in the 'sixties: Bradshaw..... Butterfield..... Banning..... Weaver.....
- 7—The famous Mormon Battalion was recruited to: Aid the conquest of California..... Colonize Utah..... Open a new Northwest trail..... Guard the Santa Fe trail.....
- 8—McNary, Arizona, is known for its: Gold mines..... Lumber industry..... Indian crafts work..... Scenic rock formations.....
- 9—Indians who call themselves *Dine*, meaning "the people" are the: Yuma..... Hualapi..... Navajo..... Mojave.....
- 10—Death Valley was given its name by: Jedediah Smith..... Death Valley Scotty..... Bennett-Arcane party..... Pacific Borax company.....
- 11—The Wasatch mountains may be seen from: Tucson..... Needles..... Flagstaff..... Salt Lake City.....
- 12—The San Juan river is a tributary of the: Colorado..... Rio Grande..... Green river..... Gila.....
- 13—The famous "Rock of Ages" in a western national park is at: Zion..... Grand canyon..... Carlsbad caverns..... Mesa Verde.....
- 14—Ed Schiefflin was the name of the man credited with the discovery of: Rainbow Natural bridge..... Casa Grande ruins..... Silver at Tombstone..... Potash at Trona.....
- 15—The career of Billy the Kid is associated with the state of: Arizona..... New Mexico..... Utah..... Nevada.....
- 16—Piper's Opera House is a landmark at: Tombstone..... Randsburg..... Virginia City..... Rhyolite.....
- 17—One of the following desert trees has a deep blue or purple blossom: Joshua tree..... Mesquite..... Ironwood..... Smoke tree.....
- 18—An Indian kiva is used for: Gathering saguaro fruit..... Ceremonial purposes..... Carrying the papoose on its mother's back..... Charming snakes.....
- 19—The annual Inter-Tribal Indian ceremonial is held in August at: Prescott..... Kayenta..... Window Rock..... Gallup.....
- 20—Deglet Noor is the name of a: Famous Paiute Indian Chief..... Species of date palm in Coachella valley..... Mountain peak overlooking Death Valley..... Bridge in the Natural Bridges national monument.....

AMATEUR GEM CUTTER

By LELANDE QUICK, Editor of The Lapidary Journal

Until recently one could not get a car without buying a lot of extras, including everything from a radio to a platinum bud vase. Now that cars may be purchased without the extras we find few who would buy one stripped bare because most of the gadgets are considered indispensable.

But lapidary equipment can be purchased without the extras and that is why it is so difficult to advise people who ask "how much will it cost?" etc. It depends on how many extras the lapidary will regard as necessary. We shall discuss a few of them.

One extra we regard as indispensable is an eye loupe. How can you do good work if you can't see it? You couldn't enjoy gem cutting if you were blind. You have but 50 per cent enjoyment if you're half blind. And you're certainly more than half blind without a loupe. There are all kinds of loupes at all kinds of prices. We carry one in our pocket for the examination of chanced-upon items. It cost us \$1.05. We work with another that gives binocular vision and it is always available for any stage of gem grinding for it is attached to the head. It costs \$8.50.

Another item we are fast regarding as indispensable is a hand rock-crusher that gives 400 pound pressure with a 20-pound hand grip. This enables a person to trim off more material in an hour than he could grind off in three. And think of the saving in wheel wear! It costs \$2.70. We briefly mentioned this valuable gadget last month.

Pumps are rapidly becoming musts on lapidary equipment and they are almost never included in the price. We know of one fine coolant pump designed specifically for gem cutters that can be attached to any equipment. It can be plugged to any outlet and it will direct the coolant to any desired spot. It costs but \$12.50 including the motor. Once you have used a pump you will wonder how you ever got by without it.

Of course you're going after rocks and you will need a prospecting pick. Too often in the past the rocks would break the pick instead of yielding to it and then where were you? You were through for the day; like having a fish run away with your line. But now there is an unbreakable pick for \$3.25.

You definitely belong to the Model T or mud-saw era if you have no templates. These remove the guesswork from gem cutting and assure better shaped and accurate cabochons. They cost from \$1.00 to \$3.50. And you are "old hat" if you haven't a diamond wheel dresser, procurable for \$5.00.

There are lots of expensive gadgets that the amateur gem cutter has yearned for but done without because they cost too much. For the more scientifically minded these are now available at amazingly low prices. There is an ultra-violet lamp requiring no batteries for only \$12.50! There is a microscope the size of a fountain pen that you can take right into the field in your pocket to uncover new worlds. It is only \$15.00! Larger compound microscopes for your

shop or home laboratory are available for as little as \$49.50. For \$212.00 you may now purchase a microscope that would have cost \$500 three years ago—if any were to be had.

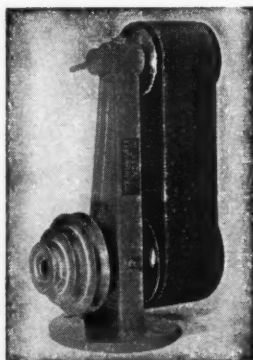
If you have reached the faceting stage in gem cutting there are many things indeed that you will want and should have. They are all freely available at much lower prices than formerly for they have been designed for the growing field of amateur gem cutters and gemologists. Think of a good dichroscope for as little as \$5.50 or a refractometer for only \$89.00. You will want the best polishing agent for most faceted gems even if it does cost around \$18.00 a pound. You will also consider a set of faceting charts a must at \$4.00 a set for they show complete details for 64 styles of facet cuts.

And surely you will wish to enter the vast field of faceting soft stones. Most of them were beyond faceting for they ground away too rapidly because the lap wheels ran too fast. Now you can get a motor for \$8.95 that will run your laps at various speeds and as slowly as 8 R.P.M. Imagine faceted Wulfenite! It can be accomplished with such a motor.

There are many, many more extras available. You don't have to have them to be happy but you do to be happier and to turn out perfect work in less time. Always remember however that you are never going to turn out perfect work with imperfect material. Where do you get all these gadgets? Look through the catalogs of the various dealers or we will supply the sources if you specify the items in which you may be interested if you send an addressed and

THE ALTA GEM SANDER

The All Purpose Sander and Polisher



FEATURES

Endless Belts.
Eliminates bumps.
Runs cool with minimum heat.
Resiliency with low and high tension.
Quick change from one belt to another.
Frame—aluminum casting.
Finish — Nassau green.
Price (less belts)
.....\$18.50
3 belts 120, 220, 320 Grit.....\$1.00

One Woven Polishing Belt.....\$2.60

Prices F.O.B. Pasadena, California (California Purchasers Add Sales Tax)

Other Lapidary Equipment - Alta Trim Saw Unit New Improved Alta 18-inch power feed diamond slabbing saw. Alta arbor. New Alta Reversible Drill and Hand Drill Presses.

ALTA INDUSTRIES

Lapidary Equipment - Manufacture and Design
915 East Washington Street
PASADENA 6, CALIFORNIA

stamped envelope. But most of the things referred to have been advertised in these pages so examine the ads in the back issues of Desert before you write.

Mahlon Frank of Lamanda Park, California, writes: "I wish to commend your department in the February issue of Desert Magazine. It is so, so obvious that it seems surprising that no one ever approached similar queries from that angle. Your answer to your correspondent applies equally well to all queries of that nature whether in the lapidary field or any other. Suggest that you have a million copies of your answer made so that you can send them to anyone requesting information in the future. Some will snort and sneer but you have hit upon the answer to that ever-present query by the amateur—"What equipment shall I buy?"

GORDON'S

GEM AND MINERAL SUPPLIES

"Dependable Lapidary Equipment"

Write for Our Price List

1850 E. PACIFIC COAST HIGHWAY
LONG BEACH 6, CALIFORNIA

The Lapidary Journal

A National Magazine for the Gem Cutter
Collector and Silversmith

Some back issues available at 50c each.
Subscription \$2.00 per year (6 issues)

P. O. Box 1228 Hollywood 28, Calif.
LELANDE QUICK, Editor and Manager

BEFORE YOU BUY ANY LAPIDARY EQUIPMENT—Send for our BIG, FREE CATALOG

32 Pages packed full of helpful Lapidary Instructions...Should be in every rock nut's library. Plus complete information on the famous Hillquist line of Lapidary Equipment including Hillquist Compact Lap Unit, Hillquist 16" Rock Saw, Hillquist Trim Saw, Hillquist Auto Feed, Hillquist Gem Drill & Hole Saw, Hillquist Facetor, Hillquist Drum Sanders & Hillquist Diamond Saws

Send NOW to Lapidary Equipment Co. 1545 W. 49 ST. • SEATTLE 7, WASH. "NATION'S LARGEST MFGRS OF FINE LAPIDARY EQUIPMENT"

the things
in these
back issues

ark, Cali-
end your
of Desert
t it seems
approached
Your an-
es equally
whether
Suggest
your an-
them to
the future,
you have
er-present
equipment

P'S

LIES

ment"

GHWAY
A

rnal

a Cutter

c each.
sues)

B, Calif.
Manager

DARY

our

EE

G

y Inst-
library

mous

cluding

k Saw,

quist

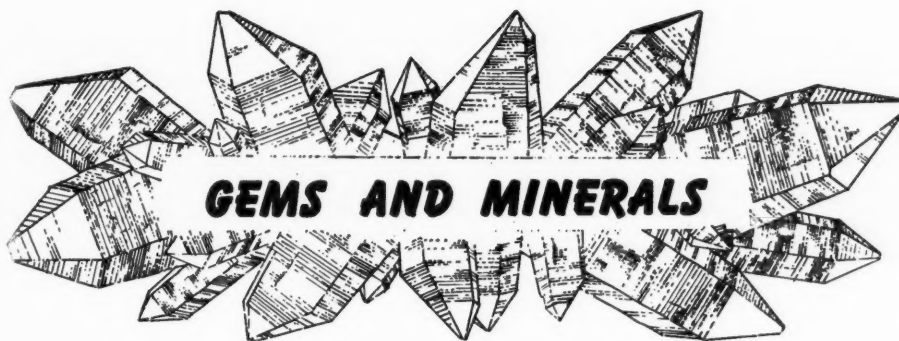
aws

co.

SH.

EQUIPMENT"

ZINE



MINERALOGICAL SOCIETY CELEBRATES BIRTHDAY

Mineralogical Society of Arizona celebrated its 13th birthday December 3. Of the original group, four charter members were present. They were: Luther Steward, H. B. Holloway, Ben Humphreys and A. L. Flagg. Only 20 were present at the first meeting. This year 76 attended. C. H. Preston of the Minnesota Geological society, recently appointed chairman of the division of geology for the 1949 meeting of the American Federation of Mineralogical societies, spoke briefly about the American Federation and brought greetings from the Minnesota society. George W. C. Green of the Tacoma Agate club brought a fine exhibit of petrified limb and twig sections from the state of Washington. The party was voted the best ever.

Outstanding feature of Gadget Night, December 17, was Floyd Getsinger's "laboratory in a nutshell," a compact kit. It weighs less than a pound and a half and contains all but pick and water canteen. With this kit more than 20 elements can be determined in the field by the simple methods set out in George Fansett's "Field Tests for the Common Metals"; bulletin published by the Arizona Bureau of Mines.

A field trip to Lithia Giant claim in Upper Trilby wash, was planned for January 9. Earl Anderson, owner, was to be host for the occasion. Mummy mountain was to be the field trip for January 23, where a search would be made for tourmaline and garnets in the pegmatite dikes which are abundant all over the mountain.

SOUTHWEST MINERALOGISTS PLAN FOR APRIL SHOW

Mr. Trombatore, show chairman, announced that April 16 and 17, 1949, would be the dates for the 12th annual show of the Southwest Mineralogists. The show will be held at the Masonic Temple, 41st Place and Figueroa, Los Angeles. Admission free. The public is invited.

Charles S. Knowlton, well known collector of garnets, was guest speaker at the January 10 meeting. Many interesting facts were disclosed including the fact that all colors and shades but blue have been found. Many fine specimens from his collection were on display. In his collection are two beautifully hand carved figures of garnet. The January field trip was scheduled to be to Gem hill near Rosamond, where gem quality bloodstone has been found.

ANNUAL ROCK SHOW OF TEXAS TO BE HELD IN SAN ANTONIO

The State Mineral Society of Texas has made final arrangements for its annual rock and mineralogical show. The show is to be held April 23-24, on the roof garden of the Plaza hotel, San Antonio. The garden is large and well lighted. The size of the tables will be 30x72 inches. No charge

will be made for displaying or selling supplies, equipment, or rocks at the show. There will be a display of Texas agates and the handiwork of members of the society. Much lapidary work has been done in Texas in the past year. For information write J. J. Brown, president, State Mineral Society of Texas, 302 Walton Bldg., Austin, Texas.

SURVEY RIGHTS GRANTED NEW MEXICO UNIVERSITY

New Mexico university has been granted exclusive permission to hunt for meteorites on lands surrounding Meteor Crater in northern Arizona. According to O. C. Williams, state land commissioner, Phoenix, state land is not involved. Private operators and owners have the right to grant exclusive prospecting privileges to anyone.

The survey which the university will make in the area is a renewal of investigations in the Canyon Diablo area begun by Ohio State university meteorite expeditions in 1939 and 1941.

GEM VILLAGE

The Rockhound Colony

For anything in gems, jewelry, cutting materials, or a location for shop, business or just a nice place to live, write to

FRANK MORSE
BAYFIELD, COLORADO

CHOICE CABOCHON MATERIAL

Fine crystallized minerals.

Mineralight and fluorescent minerals.

MINERALS UNLIMITED

1724 University Ave., Berkeley 3, Calif.

"Selections personal as your own"

MOUNTINGS

18" NECK CHAIN—Sterling, doz.....	\$ 3.50
Gold Filled, doz.....	4.50
No. 201-S Sterling Silver Bezel, ft.....	.30
No. 201 Gold Filled Bezel, ft.....	.55
No. 238 Gold Filled Bezel, ft.....	.50
CLEVICES for pendants, GF, doz.....	1.25
CLEVICES for earrings, GF, doz.....	1.20
PENDANT FRAMES, with chain,	
22mm Round or 18x25mm Oval,	
Sterling Silver or Gold filled, doz.....	12.00
TIE SLIDES—Gold Filled, doz.....	6.00
CAST RINGS—Men's heavy Sterling,	
assorted shapes, unfinished, doz.....	9.00
Additional Items When Available	

Agate Jewelry Wholesale

(Price List Available)

O. R. JUNKINS & SON

P. O. Box 1295 NEWPORT, OREGON

RUTILE--THE GEM OF THE HOUR

Rutile is a reality. RUTILE IS THE MOST AMAZING GEM KNOWN. It has a much higher refractive index than Diamond. In the sunlight sparks of refractive fire are thrown out by every facet. It displays all the colors of the rainbow in a dazzling play of color.

IT MUST BE SEEN TO BE APPRECIATED

Nothing has created such intense interest and excitement as has the showing of these gems. A recent issue of The Saturday Evening Post gave them a prominent write-up. Cut gems are now actually in stock and available for immediate delivery.

ROUND BRILLIANT CUT GEMS ARE PRICED AT

1/2 to 3/4 carat gems at \$12.50 per stone
1 carat gems at \$15.00 per stone
1 1/2 to 2 1/2 carat gems at \$12.50 per carat
3 carat and larger gems at \$10.00 per carat

Add 20% Federal Excise Tax and California Sales Tax to Above Prices

PRICES ON ROUGH BOULES, BOULE SECTIONS and PREFORMS ON REQUEST

DEALERS' INQUIRIES SOLICITED

MEN'S RINGS, LADIES' RINGS, AND EARWIRES MOUNTED WITH RUTILE AVAILABLE IN GOLD AND PLATINUM

GRIEGER'S "ENCYCLOPEDIA AND SUPER-CATALOG OF THE LAPIDARY AND JEWELRY ARTS" Is as Sensational as Are the NEW RUTILE GEMS

Read what purchasers of this new book are saying:

"I would still buy it at \$3.00 to \$5.00 as it contains as much, if not more, meaty information for the lapidary and jeweler than any of the books on the market selling in that range."

"It is the only satisfactory catalog of lapidary supplies and materials that I have ever seen. It is superbly illustrated and beautifully printed."

Send \$1.00 for this 160-page bound book 9x12 inches in size. It is sold for only a portion of its actual cost. May be returned for full cash refund if not satisfactory.

Grieger's

1633 EAST WALNUT STREET
PASADENA 4, CALIFORNIA.
PHONE SY6-6423

OPEN ON FRIDAY AND SATURDAY ONLY 8:30AM-5:30PM-
MONDAY THRU THURSDAY OPEN BY APPOINTMENT ONLY

GEM MART

ADVERTISING RATE
8c a Word . . . Minimum \$1.00

RARE FERN AGATES from India. The most rare in the world, in ring and brooch size. Cinnamon stones from India, \$5 each. Most curious stone from India, large size which rattles and bends, natural stone, for \$5. Large rough garnets for cutting, of finest quality. 25 carats of cut Ceylon native zircons for only \$25, many colors included. Ceylon moonstones, 25 carat lot for \$12.50. Rare blue precious opazes, \$1 per carat. Rare green garnets, \$3 each. Mosaic stones, \$5 each. Finest white brilliant cut zircons and many other fine cut stones. Mother of pearl cameos, \$2 each. Also many others. Carved obsidians, per dozen \$4.50. Ask for my approval selection. Ernest Meier, Church Str. Annex, P. O. Box 302, New York 8, N. Y.

RARE MINERAL of "Gehlenite." Takes fine polish, 5 lbs. postpaid, \$1.50. Much cheaper in lots. A. J. Evans, 212 E. Hemlock St., Deming, New Mexico.

FIRE OPAL—We are now specializing in all grades of Australian cutting fire opal. We stock this lovely opal in all price ranges. Also cutting material and specimens. No mail orders. West Coast Mineral Co., 1400 Hacienda Blvd. (State Highway 39), La Habra Heights, California.

LOOKING FOR RARE, unusual, faceted gems? Send specifications and we'll get it for you. Five-pointed, faceted, quartz crystal stars, drilled for mounting, 1/2-in. \$5.00 per pair, 3/4-in. \$6.20 per pair, postage and tax included. 25 colorful Western minerals, labeled, attractively mounted \$1.75 postpaid. 60 minerals, official Boy Scout set, indexed in box, \$4.00 postpaid. Brilliant minerals, gems, fluorescents. Write for free lists. Superior Minerals, Box 248, Saint George, Utah.

CARNOTITE, low grade URANIUM base ore specimens. Bright yellow on copper carbonate base. Colorful for your cabinet, \$5.00 lb. Also some carnotite Pseudomorph after wood, \$1.00 an ounce. Carnotite in sandstone formation, \$2.00 lb. Plus postage on all orders. Limited supply. Jay G. Ransom, Palm Desert, California.

BARIUM CRYSTALLIZATION from a new find in Arizona. Outstanding cabinet specimens, \$1.00 and up, postpaid. Tucson, Thompson, 10016 N. Seventh Place, Phoenix, Arizona.

MONTANA YELLOWSTONE VALLEY Agate Cabochons, \$1.50 to \$10 each. C. T. Royels, Box C, Brady, Montana.

Mojave Desert Gem and Mineral Shop . . .

On Highway 91, 11 Miles East of Barstow
One Mile West of Yermo, California
E. W. Shaw, P. O. Box 363, Yermo, Calif.

DIAMOND DRILLING

Two Rigs - Go Anywhere
\$3.50 a Foot Up

Special Deal on Large or Several
Small Consolidated Contracts

E. R. BISSETT

P. O. Box 44 WINCHESTER, CALIF.

URANIUM

Radiation detection, lightweight, sturdy
Geiger Counters. One-year guarantee.

MINERAL PROSPECTING EQUIP. CO.
2200 N. Reese Place, Burbank, Calif.
CHarleston 8-4838

Please Send Latest Folder

Name.....

Street.....

Town....., State.....

SHELL JEWELRY SUPPLIES—\$5.00 brings you 30 packages of beautifully colored shells plus one dozen fancy cut shells and enough supplies to make 7 brooches and 15 pairs of earrings. Satisfaction guaranteed and postage prepaid. Shell Supply Co., 260 East First St., Long Beach, California.

FINE CUTTING TURQUOISE—Good quality, \$2.00; high grade, \$3.00; extra quality, \$4.00 to \$5.00 per ounce. E. P. Woods, Farmington, New Mexico.

COLORFUL AGATES AND WOODS from Arizona, Utah and New Mexico. The hard-to-get Black Wood, Utah Pigeon Blood Agate, Golden Moss, Red Moss, Red Banded, Black and Red Banded, Black Agate, Jet, Black, Colored and Picture Wood, Chrysocolla with Malachite inclusions. Very colorful Dinosaur Bone, Utah. The above minerals, 15c sq. in. Will assort. Rough \$1.50 lb. Minimum order \$1.50. Approximate postage please. Good solid Green and White Banded Ricolite, New Mexico 50c lb., fine for book-ends, etc. Come and pick out your own. Materials as low as 35c lb. Geo. C. Curtis, The Agate Man, 645 First St., Hermosa Beach, California.

GET MIN LAB—A laboratory in a nutshell. A practical field test kit. NO KNOWLEDGE OF CHEMISTRY NECESSARY! Min Lab weighs 1 1/2 pounds. Sturdy leather case 2x3 1/2x5 1/2 inches. Instructions list 66 tests for 36 different metals including gold, silver, uranium, many others. Only \$9.75 cash postpaid or send \$2.00, pay postman balance plus postage. Min LAB, 1314-D W. Portland, Phoenix, Arizona.

MINERAL SETS—24 Colorful Minerals (identified) in 1x1 compartments—Postage paid, \$3.50. Prospector's Set of 50 Minerals (identified) in 1x1 compartments in cloth reinforced sturdy cartons. Postage paid \$5.75. Elliott's Gem Shop, 26 Jergins Arcade, Long Beach 2, California.

AGATES, NEW FIND, Escadillo and Cameo, 15c inch, 75c pound. Also Red and Golden Moss, Montana, Amethyst Agate, Palm Wood, Arizona Wood, Poppy Jasper, all 15c inch, \$1.00 pound. Postage extra. Send for list. Sequoia Gem and Mineral Shop, 321 W. Tulare, Visalia, California.

BEAUTIFUL QUARTZ CRYSTAL Groups—Colors, white, red, citron. Choose your color. One for \$2.00, all three for \$3.50. Nice size. Ask for list of other fine specimens. Jack The Rockhound, P. O. Box 86, Carbondale, Colorado.

RADIOACTIVE MINERALS—Samarskite, 1x1, 50c; 1x2, \$1.00; 2x3, \$3.00. Euxenite, 1x1, 75c; 1x2, \$1.50; 2x3, \$5.00. Columbite, 1x1, 50c; 1x2, \$1.00; 2x3, \$3.00. Write for catalogue. Eckert Mineral Research, Dept. D, 110 E. Main St., Florence, Colorado.

NEW FIND—Obsidian round eggs, good colors, 5 lbs., \$3.50, prepaid. Selling silver shop at inventory price, take trailer house in payment. Reason, rheumatism. Located on Highway 40. L. A. Hansen, 1505 E. Fourth St., Reno, Nevada.

NINE SELECTED minerals in a card box, each specimen fits in a space 2 1/2"x3 1/2". Price \$3.00. Set No. 1. Twenty-four mineral specimens in a card board box. Each mineral fits in a space 1 3/4"x1 3/4". Priced \$3.00. Set No. 2. Special prices to dealers who buy one dozen or more. W. T. Rogers, 1230 Parkway Ave., Salt Lake City 5, Utah.

GOOD CUTTING MATERIAL—Agates, Jasper, Agatized Wood, etc. 5 lbs. \$3.50; 10 sq. in. \$2.00. Larger amounts at reduced rates. Nevada Turquoise, good color, 20 cents carat up. Rough Turquoise to cut, \$1.50 per oz. and up. Cutting, polishing and silver work done. Free list cutting materials, minerals, specimens and supplies of all kinds. John L. James, Box 378, Battle Mountain, Nevada.

GEMS ROUGH OR POLISHED

EQUIPMENT, BOOKS, MAGAZINES and EVERYTHING needed by CUTTER or COLLECTOR. Send 10¢ for COMPLETE CATALOG and CREDIT SLIP worth 25¢

The GEM EXCHANGE

BAYFIELD COLORADO

FRIDAY RANCH nodule slabs, unpolished, 75¢ each. Each one different. Average size 2 inches square. Jack R. Ball, Box 63, Altadena, California.

WHEN YOU TRAVEL Sixty-Six Highway, stop at Boodle's place, one mile west of Galena, Kansas. Thousands of fine minerals, Indian relics. Dealers Welcome. No mail orders, please. Boodle Lane, Box 331, Galena, Kansas.

MINERAL SPECIMENS, slabs or material by the pound for cutting and polishing, RX Units, Felker Di-Met and Carborundum Saw Blades, Carborundum wheels Cerium Oxide. Mountings. Approval selection sent upon request. You are welcome. A. L. Jarvis, Route 2, Box 350, Watsonville, California, on Salinas Highway.

AGATE FOR SALE—We have Red and Black Plume, Blue and Pink Banded, and many kinds of Moss Agates. All at our ranch at Alpine, Texas, or write J. A. Anderson, Box 182, Alpine, Texas.

BEAUTIFUL AUSTRALIAN Opal Cabs, 10x8—\$3.00 to \$7.20. 12x10—\$4.80 to \$9.00. Opal rough for cutting \$1.20 and \$2.00. Ace Lapidary, Box 67, Jamaica, New York.

BRAZILIAN AGATE, Specimen pieces, also good for coloring, \$1.00 a pound. Pieces run from one to ten pounds each. Black Onyx Blanks, 16x12 and 14x12 size—\$2.50 dozen. Mail orders filled promptly. JUCHEM BROTHERS, 315 W. Fifth St., Los Angeles 13, California.

BEAUTIFUL ARIZONA AGATES, Polished samples and listings \$2.00. Unpolished samples \$1.00. Arizona Agate Mines, Cave Creek, Arizona.

OREGON PLUME AGATE, from noted Central Oregon gem fields. Finest quality plumes, \$1.50 sq. in. Assorted, vari-colored types, \$1.00 sq. in.; cabochon sized slabs, 50c each. Small rough chunks, \$5.00 lb. Fair warning folks; this Plume is in strong demand and is going, going—Choice Red Moss Agate \$3.00 lb. Other gemmy types of Moss \$1.25 lb. From Plume vein, mixed moss and plume, vari-colored, 2 lbs. \$3.00. Include postage on rough Agate, please. Satisfaction guaranteed. C. G. Springer, 862 Roosevelt Ave., Bend, Oregon.

AT THE DESERT RAT'S NEST—Coober pedy opal, pinpoint and blue fire (10 carat ant-hill garnets, will wholesale smaller grades), cut and uncut moonstones, Ceylon. All Brazilian facet material in stock. A new blue sapphire up to 10 carats, flawless. Australian and Siam uncut zircons, Burma rubies, Tasmania white zircons, Queensland sapphires. Geo. W. Chambers, P. O. Box 1123, Encinitas, Calif. Visitors inquire at Kizer's filling station, corner 101 and F street for address.

TEXAS AGATES—Five pounds selected from all locations, including plume, iris, fortification, scenic, opal assortment, etc., postpaid, \$5.00. Visit. 20 tons to select from at 25c per pound. El Paso Rock and Lapidary Supply, 2401 Pittsburg St., El Paso, Texas. Phone 5-8721.

MONTANA MOSS AGATES in the rough for gem cutting \$1.50 per lb. plus postage. Also Slabbed Agate 25c per sq. in. (Minimum order \$1.00). Elliott Gem Shop, 26 Jergins Arcade, Long Beach 2, California.

ATTENTION ROCK COLLECTORS. It will pay you to visit the Ken-Dor Rock Roost. We buy, sell, or exchange mineral specimens. Visitors are always welcome. Ken-Dor Rock Roost, 419 S. Franklin, Modesto, California.

MINERALS, GEMS, COINS, Bills, Old Glass, Books, Stamps, Fossils, Buttons, Dolls, Weapons, Miniatures, Indian Silver Rings and Bracelets. Also Mexico. Catalogue 5c. Cowboy Lemley, Las Cruces, New Mexico.

SPECIAL, \$1.00 SPECIAL—Your choice: Six Redondo Beach moonstones; 6 Wyoming Sweetwater Agates; 10 Apache Teardrops, all 3/4-inch size; 3 sawed halves geodes and nodules or 3 whole; 1 lb. Turquoise, small pieces for small stones; 2 lbs. Howlite; 10 sq. in. colorful Lavie Jasper; 6 sq. in. Picture Wood. Approximate postage, please, except on order of \$5.00 or more. CABOCHON SPECIALS—3 for \$1.00. Ring size, assorted, polished, ready to mount. A real buy. Cabochon Blanks, 6 for \$1.00, assorted sizes and materials, sawed closely. Postage paid on this special. Satisfaction guaranteed. Motion Minerals & Mining, 1901 South Muscatel Ave., Rosemead, California.

MINERAL SPECIMENS—Micro-mount and Thumb-nail sizes; write today for free list. J. E. Byron, Mining Engineer, 1240 Pearl Street, Boulder, Colorado.

FIFTY MINERAL SPECIMENS, 3/4" or over, boxed, identified, described, mounted. Postpaid \$4.00. Old Prospector, Box 21B223, Dutch Flat, California.

THE DESERT MAGAZINE

AMONG THE ROCK HUNTERS

Newly-organized Yuma Gem and Mineral society enjoyed a January trek to Gold Rock ranch. Mr. and Mrs. C. S. Walker, owners and operators, displayed their rare and unusual collection of minerals and Indian relics. Leaving Gold Rock ranch, the travellers made their way to the Tumco range, west over Black Mesa. This area is covered with volcanic fragments, predominantly lava and conglomerates. Many fine specimens were uncovered including petrified palm and palm fiber.

The Northwestern Michigan Mineral club was formed December 14, and the following officers elected: C. A. Miller, president; Dr. B. H. VanLeuven, vice-president; James C. Moulton, secretary-treasurer. Meetings will be held on the second Wednesday of each month. The club has in its membership lapidary, silver workers and collectors of rocks and minerals. It is open to anyone. Visitors are welcome.

The Yavapai Gem and Mineral society met in the music room of the Prescott junior high school Wednesday, January 5, for the first meeting of the New Year. A large audience heard a talk by Dr. Ralph S. Cannon, of the U. S. Geological Survey, on "The Fluorescence of Scheelite." Dr. Cannon brought a mineral light and specimens to illustrate his talk. Answering the "\$64 question" as to how a fluorescent mineral, when it absorbs ultra-violet light, is able to change or transform this energy into visible light, Dr. Cannon said it was done by atoms within the mineral. "When an atom in a fluorescing mineral absorbs ultra-violet energy, one of its planet-like electrons is pushed from its own orbit into a new orbit farther from the nucleus. In most cases the electron instantaneously snaps back to its own orbit. In doing so it gets rid of its excess energy, giving it off in the form of visible light. . . . With some minerals, the displaced electrons do not snap back into place instantaneously, but only after some time has elapsed. Such minerals continue to glow for a period after the ultra-violet lamp has been turned off. This is the explanation of the afterglow that we call phosphorescence." Mrs. E. E. Michael, secretary-treasurer, reported that 31 new members have joined the society since November. Total membership is 93.

"Rocks from the Artist's Viewpoint" will be long remembered by the members present at the January meeting of the Texas Mineral society of Dallas. Otis Dozier, one of the leading artists of the Southwest, gave an interesting and informative talk. He illustrated with beautiful colored slides of various agates and rocks and pointed out the abstract pictures which the artist sees in them. The coloring of agates and other minerals is very unusual and is duplicated by artists to obtain unique coloring for their own pictures. Colors found in agates and minerals can be found in no other formation.

Recently C. L. Harris of El Paso, Texas, made a rich find of high grade iris agate, at a new locality in Texas. Harris reports that about half of the agate found at the new locality runs in iris. As a general rule only a small percentage of agate found at a locality will run into iris, if at all.

BLYTHE DESERT GEM SHOW SCHEDULED FOR MARCH

The Desert Gem show is to be held at Blythe, March 4, 5, 6, at the Junior high school. Amateurs are invited to exhibit, and outsiders are welcome. Dealers will be limited to four or five. Exhibitors must arrive not later than 3:00 p. m., Friday, March 4, to arrange their displays. The show will be open to the public 7:00 p. m. Friday evening.

Two field trips have been planned: one to the Arizona quartz crystal field Saturday morning, March 5, and one to the Houser geode beds, Sunday, March 6. The Sunday trek will begin at 7:00 a. m., and participants must furnish their own lunch. Other events of the show will include a grab bag and raffle.

Executive committee: Collis Mayflower, chairman; Dessel Mayflower, raffle and grab bag; Dale Breman, property and machinery for demonstrations; George King, displays; Lyle Addison, lighting; Emmy Lou Coronas, publicity and decorations; Glenn Vargas, field trips.

IMPERIAL VALLEY ANNUAL GEM AND MINERAL SHOW

Imperial Lapidary guild and Gem and Mineral society have set the date of their annual show for April 16-17. The show will be held at the El Centro junior college. A committee: George Moore, Chuck Holtzer, Ed Stevens, C. K. Patton and L. G. Beale, is planning the exhibit.

The Valley rockhounds are having some cool field trips, but are bringing in nice material. As one Mrs. Rockhound said, "I don't feel the cold when I am picking up 'hot rocks.'"

The recently founded Illowa Rock club of Davenport, Iowa, is growing rapidly in membership. The club has membership in both Illinois and Iowa, and its name is derived from a combination of these state names. Many members of the club are installing lapidary equipment in addition to their mineral collection.

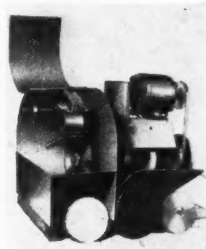
ROCK COLLECTORS ATTENTION—As you drive Highway 111 look for the

TRAILER ROCK STORE

I carry the finest variety of Rock and Mineral specimens in the West. REMEMBER I have NO private collection so everything is for sale.

THE ROCKOLOGIST (Chuckawalla Slim)
Box 181 Cathedral City, Calif.

The following officers have been elected by the Feather River Gem and Mineral society of Oroville: F. E. (Red) Rankin, president; Don Parker, vice-president; Mrs. Iva Foster, secretary; Chas. Andrews, treasurer; Lee Reeves, Arthur Mitchell and Art Parker, directors. Mr. and Mrs. F. E. Rankin were presented with a cake tastefully decorated with tin objects, as it was the eve of their 10th wedding anniversary.



RX-47

**A Complete
Lapidary Shop
in One
Compact
Machine**

The most practical
ever devised for
gem cutting and
polishing.

Send for Circular A

Price, Less Motor and Saw Blade
\$157.50 F.O.B.

RX LABORATORY

1317 Seaman Ave. EL MONTE, CALIF.

Fire Opal - Mexico

10 small pieces—average 1/2"-3/4"	\$1.00
5 larger—average 3/4"-1"	1.00
6 still larger—1"-2" or over	2.00
1 small vial clear fire opal	1.50
50 rough mixed Mexican Opals, including honey, cherry, etc., average 1"	1.50

ALL 5 LOTS POSTPAID—\$6.00

Although these are sold chiefly as cabinet specimens and have plenty of fire, many of them will work up into new cabochons.

Money Cheerfully Refunded if Not Entirely Satisfactory

Polished Mexican Opals and other gem stone cabochons on approval to responsible persons.

DR. RALPH E. MUELLER

3701 Valentine Road Kansas City 2, Mo.



Here Are The Gifts You've Been Looking For!

Petrified Wood, Moss Agate, Chrysocolla
Turquoise, Jade and Jasper Jewelry

HAND MADE IN STERLING SILVER

**Bracelets, Rings, Necklaces, Earrings
and Brooches**

**SPECIALLY SELECTED STONES WITH
CHOICE COLORS AND PICTURES**

Write for Folder With Prices

ELLIOTT'S GEM SHOP

26 Jergens Arcade

LONG BEACH 2, CALIF.

Entrance Subway at Ocean and Pine
Open 10 A. M. to 10 P. M. Daily

URANIUM PROSPECTORS

Know What to Look for
Send \$1.00 for Samples of Ore Containing
Carnotte - Autunite - Torbernite
Will Also Test YOUR Samples With
Latest Beckman MX5 Geiger Counter
Three Samples, \$1.00
GLENN J. E. TRAMILL
JOHANNESBURG, CALIF.

MOVED

PIONEER LAPIDARY SCHOOL
to its new home at CLIFF SIDE on
Highway 34, six miles west of Loveland,
Colorado. Three months' summer course.
Store and Museum - Trailer Court
M. J. STICKLES, Owner-Director
The Rockhound School

ROCKS MINERALS GEMS

DESERT GEM SHOP

Two Miles West of Salome, Arizona
on Highways 60 and 70

GUY G. EMERY
SALOME, ARIZONA

Rock Cutting - Rings Moun'ed to Order ROCK and GEM HOBBY SHOP

FELIX BRADDI, Owner
Stones Ground and Polished
Uranium Ore Tested - Western Jewelry
Highway 60, Box 54 Ph. Moreno 338
SUNNYMEAD, CALIFORNIA

NEW!

For the Lapidary
The BEAR Arbor, ball bearing, has a
3/4 by 9 1/2-inch shaft. Sturdy, compact
and with patented snap-on lock for drum
and disc sanders. Comes equipped with
three aluminum 8 by 2-inch drum
sanders. Disc sanders extra.
COMPLETE, \$27.50

We also have—
ORCUTT FACET HEAD \$77.00
ORCUTT HEAD AND LAP UNIT 123.50
(Literature Available)

Highland Park Lapidary Equipment
Perry Trim Saws and Perry Drills
Lapidary and Silvercraft Supplies
Shipping Charges and California Sales
Tax Extra

S-T GEM AND MINERAL SHOP
6924 Foothill Blvd. Tujunga, Calif.

- New beauty in collections
- Instant identification
- Faster analysis
- Uncover new wealth

SEND
FOR
BULLETIN
D200

MINERALIGHT does all this with
such ores as Scheelite, Uranium,
Mercury, Zircon, Hydrozincite,
Willemite and many other minerals
and materials. See these com-
pletely portable lamps at your
MINERALIGHT DEALER. 12
models from \$12.50 up.

UltraViolet PRODUCTS, Inc.
5205 Santa Monica Blvd., Los Angeles 27, Calif.

J. G. Catisch gave a lecture on the "Minerals of Nevada" at the December meeting of the Sequoia Mineral society. Committees were appointed for a big mineral display at the banquet. The dinner is scheduled for February 5, at the Parlier American Legion hall.

Pacific Mineral society enjoyed an arm-chair trek through Yellowstone, at the January meeting. William B. Sanborn, ranger-naturalist, Yellowstone National park, presented "A Kodachrome Trip Through the Yellowstone Back Country."

The Los Angeles Lapidary society planned a surprise for the February meeting. The Jeep-Herders were to show pictures and material from a recent trip, entitled "Trails and Trials of the Jeep-Herders." Annual picnic-show will be held in the fall, and promises to be the largest get together of rockhounds in the west.

Dr. Nile Reeves, president of the San Geronio Mineral and Gem society, was to appoint committee chairmen and outline plans for the year at the January meeting. Plans will include monthly field trips. Adults interested in mineral or gem collecting are invited to attend any society meeting.

A. G. Ostergard, president of the Mineralogical society of Southern California, spoke at the January meeting of the Pomona Valley Mineral club. He brought to the meeting a fine collection of mineral specimens which he had collected on a three month trip into Mexico. These were attractively displayed in a well lighted case.

Mineralogical Society of Utah re-elected its 1948 officers at the January meeting held in the geology building of the University of Utah. Officers are Junius J. Hayes, president; Mrs. Guy W. Crane, first vice president; Alfred M. Buranek, second vice president; W. Glenn Rottman, secretary; Kenneth Tanner, treasurer.

"Diamonds and Colored Gems" was the subject of a talk by Robert R. Fudge at the January meeting of Santa Monica Gemological society. Mr. Fudge is recognized as a leading authority and lecturing on gemstones is his hobby. With the aid of charts, he told of composition, formation and occurrence of precious and semi-precious gems, including synthetics used in jewelry.

At the January meeting of the San Jose Lapidary society, Bob Deidrick talked on quartz and the quartz minerals. He gave a thorough and interesting explanation of the occurrence and formation of the silica minerals such as quartz, agate, jasper, opal, flint, chert, etc. He also explained the formation of plumes, dendrites and other markings and colors in agates and jaspers. Two new members were admitted to the society—Al and Myrtle Athenour. A round-table discussion was planned for the February meeting.

NEW BORDER FILIGREE BROOCHES

Suitable for Agate or Petrified Wood
\$7.00 per dozen prepaid

Assorted designs and finishes in gold and silver plate. Come mounted in white silvertone display boxes.

Four Assorted Samples, postpaid, \$2.50
HANSEN NOVELTY COMPANY
BEND, OREGON

GRAND OLD DESERT RAT KENT KNOWLTON PASSES

Kent Knowlton, known personally or by his record to all the Southwestern rock and mining fraternity, passed away January 4. Kent was born in Nebraska and came to California with his parents in April, 1886. After graduating from California Polytechnic college at San Luis Obispo, he took a contract to haul materials and supplies from Bishop, California, to the Lida Queen mine at Mina, Nevada. On one of his winter trips, when snow had fallen, he came upon a stalled auto and rescued the lone driver, who later became famous as "Death Valley Scotty." Scotty always blamed Knowlton for saving his life.

In 1920 Knowlton went to Randsburg as a mining broker, and soon gained recognition as an authority on minerals and ores. His stories about Pegleg Smith and the Petrified forest became classics and attracted hundreds of people from all over the west. He acquired a lot of relics and other things of interest, and gained the reputation of having the best "rock meal" in the country for his assortment of concretions, fantastic shaped rocks occurring as inclusions in sedimentary rocks, resembling potatoes, carrots, and other eatables.

His collection was deeded to the Kern County Desert museum where it is now on display.

ROCK, GEM, MINERAL SHOW AT SALINAS

The Monterey Bay Mineral society is planning to hold its second annual show at the YMCA building, Clay street, Salinas, February 26-27. Finished cabochons of precious and semi-precious stones, and a jewelry collection are to be exhibited. Minerals, petrified woods, rough and polished specimens of rocks, and rock-cutting equipment are to be on display. Plans also include a sales table.

Yakima Rock and Mineral club was to hold its annual banquet January 20 at the Nob Hill Grange hall. Special speakers, door prizes, and a large display of various rocks and minerals were to be features of the evening's entertainment.

A new activity, the photography of minerals in color, has been undertaken by the Los Angeles Mineralogical society. Miss Joyous MacKenzie is chairman. A visit to Crestmore quarry in November drew the largest attendance of any recent field trip. Many fine specimens of blue calcite, garnet, epidote, vesuvianite, and the incompletely identified "Mineral F" were collected by the group. The society's annual Christmas party was held December 16. Mineral specimens contributed by members were distributed by "Santa Claus" O. C. Smith. New officers for the fiscal year: Frank A. Larkin, president; Dr. Homer King, first vice-president; Charles W. Abbott, second vice-president; Maud Wheeler, secretary; Arthur G. Weigel, treasurer; Charles Schlagel, business manager; Harry C. Hurlburt, field trip chairman; William R. Harriman, federation representative.

Junior Rockhounds of Prescott elected the following officers at their January meeting: Larry Bender, president; Anne Pessin, vice-president; John Butcher, secretary-treasurer; Dick Reilly, librarian; Jimmy Pessin, Geoffrey Butcher and Donald Kentch, judges. Patricia Molmer was scheduled to speak at the February meeting.

SACRAMENTO MAKES PLANS FOR SUPER-CONVENTION

Sacramento has been chosen as the site for the 1949 convention of the American and California State Federations of Mineralogical societies. Date for the convention has been set for June 24, 25, 26, and the show is to be held in the spacious machinery building at the California State Fair grounds. This building is well equipped to handle an affair of the magnitude of the convention; with its 280,000 square feet of floor space; doorways and aisles of ample dimensions to allow dealers and participants to truck in and unload at the spot of display, and adjacent parking area to accommodate 2100 cars.

Field trips through California's fabulous Mother Lode country have been planned by the convention committee. Historic Coloma where James Marshall made his original discovery of gold in 1848, will be visited. Many of the old ghost towns that were once teeming mining centers will be included in various treks. These trips will parallel Highway 49, the Sierran Gold Belt.

Various societies located on the routes to Sacramento are planning field trips in their own localities for members and guests who will pass through on their way to and from Sacramento.

The Hollywood Lapidary society turned out to help Maud and Adolph Behner celebrate their 50th wedding anniversary in December, at the Behner home. Adolph's large collection of polished stones and jewelry were on display. At the January meeting the Gordons, well known gem and mineral dealers of Long Beach, were to be speakers. Lowell Gordon was scheduled to give a brief talk covering new items in the lapidary field, with discussions on the various operations. Mr. Gordon's talk and a general question and answer forum would be followed by "The Story of Diamonds" by Florence Gordon.

Dr. T. K. Cleveland, vice-president, research and development, of the Philadelphia Quartz company of California, was to be speaker at the regular January meeting of the East Bay Mineral society. His subject: "Chemistry and Things to Come." Dr. Cleveland is a recognized authority in the field of chemistry. Frances Niemon was to be exhibitor for the evening with a display of petrified wood. A January 9 field trip was left in the hands of the weather. If okay, a nodule deposit on the Grizzly Peak road would be visited. A deposit has been found there by one of the members, where a high percentage is the iris type. This is one of the few known locations in the world where this variety is found. A visit to Minerals Unlimited to see a beautiful and unusual collection of minerals including one of the largest fluorescent collections to be found in California, would also be included if time would permit. The owners, Scott Williams and David Grigsby, both members of the society, were to hold open house. A door prize for the occasion, one large specimen, was to go to some lucky person.

George Burnham of Burminco, recently returned from another trip to Mexico, had some interesting slides to show at the January meeting of the Long Beach Mineral and Gem society. Another event for the evening was to be the grand slam raffle. New president, Bob Schrieffer, has appointed Jim Green as field trip chairman for the coming year. Mr. Mayhew has been re-appointed membership chairman, and Mrs. Virginia Gabriel appointed permanent refreshment committee chairman.

EAST BAY MINERAL SOCIETY REVIEWS ITS FIELD TRIPS

During the past four months, members of the East Bay Mineral society have enjoyed a number of field trips under the leadership of Society president, Millard V. Moore. The field trips have also been rewarding. More than one safari was made into quicksilver mines, where members were able to obtain fine specimens of cinnabar, native mercury, calomel, serpentine and the mineral, eglestonite. Jasper hunts netted beautiful variety in color and design, some rare orbicular. One pilgrimage into the mother lode country brought forth plume agate and plume opal. An interesting trip was made into the onyx country where fine travertine samples were obtained which polished beautifully; also aragonite crystals. A trek to the Berkeley hills netted many nodules, and another day at the seashore produced opalized petrified wood, quartz, agates, fossil bones, shells and a specimen or two of jade.

"History of the Homestake Goldmine" was the fascinating story told by Dr. James A. Noble at the January meeting of the Mineralogical Society of Southern California. Dr. Noble, professor of Metalliferous Geology at the California Institute of Technology, was chief geologist for the Homestake Gold Mining company for 16 years. This fabulous mine is located in the Black Hills of South Dakota. Field trip for January to the old Sterling Borax Mine in Tick Canyon was planned. A hunt would be made for howlite, other borate minerals, zeolites and ticks.

Newly elected officers for Northern California Mineral society, Inc.: William P. Stearns, president; Ivan Branson, vice-president; Miss Patricia Truka, secretary; David Friedman, treasurer; Lloyd Demrick, curator; Mrs. Millicent McMinn, librarian; Miss Jessie Unwin, hostess. Regular business meeting was held January 11. Installation and banquet was scheduled for January 19, at the Del Mar restaurant. Plans were made for a grab bag and several door prizes.

On the eve of January 8, H. L. Monlox, of the Los Angeles Lapidary society, showed micro-mount slides of rocks collected from many parts of the world. The entire population of Picacho, and several visiting rockhounds enjoyed this two-hour program. The slides were followed with a pictorial trip, in color, along the rim of the Grand Canyon and other scenic spots of the Southwest.

"Feather River Reflections" brings news that the Feather River Gem and Mineral society has started a building fund. Ten percent of all moneys on hand, and ten percent of all future moneys collected, will be put in the fund.

Members of the Orange Belt Mineralogical society heard a very interesting and non-technical lecture on meteorites at their January meeting. Dr. H. H. Nininger, authority on meteorites, and director of the Meteorite museum at Winslow, Arizona, was the speaker.

POLISHED TURQUOISE SPECIMENS

Completely polished lumps of very fine specimen grade turquoise from several localities over the world.

Write for Price List and Approval Selection

HAROLD D. MARYOTT & CO.
Miami, Arizona

Silversmith - Stones Cut and Polished
Custom Made Mountings

POP MENARD'S HOBBY SHOP

Hobby Supplies - Scale Models
Moss Agate and Opal Collection on Display

For Repairs Phone 6423

378 S. Indian Ave. Palm Springs, Calif.
Visitors Welcome

COVINGTON "CUT-RITE" DIAMOND BLADES

Latest Improvement in Charging Process has been applied in developing these NEW COVINGTON "CUT-RITE" BLADES.



Prices F.O.B.
Redlands
Plus 2 1/2 %
Sales Tax
in California

Specify Arbor Hole Size

Size	Heavy-Duty Super-Chgd.	Super- Charge	Standard Charged
6-inch	\$ 8.70	\$ 7.70	\$ 6.75
8-inch	12.75	9.90	8.95
10-inch	15.75	12.95	11.95
12-inch	21.80	18.95	15.75
14-inch	32.30	24.95	21.85
16-inch	36.40	27.85	24.75
20-inch	66.30	44.20	33.95
24-inch	79.30	55.90	43.75
30-inch	127.25	106.95	
36-inch	192.20	159.95	

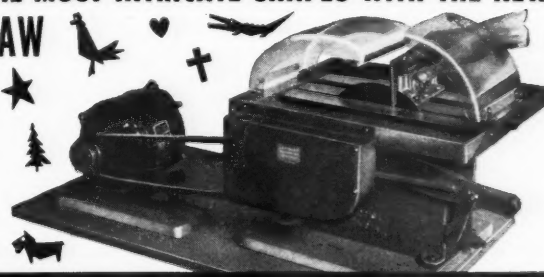
COVINGTON LAPIDARY ENGINEERING

World's Largest Manufacturer of
Lapidary Equipment

2nd and Highway 99, REDLANDS, CALIF.

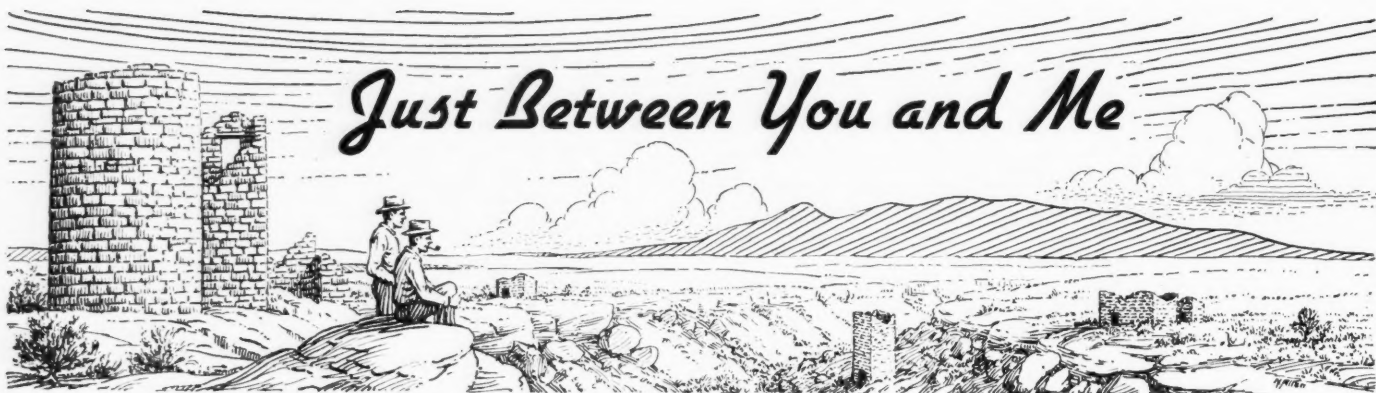
NOW... YOU CAN SAW THE MOST INTRICATE SHAPES WITH THE NEW HILLQUIST TRIM SAW

Here's the trim saw that has everything that any rockhound could ask for: Exclusive raising and lowering arbor permits perfect angle cuts at any depth—adjustable spray guards—all-metal construction—extra long rigid arbor—double ball bearings—grease pressure lubrication—precision rock clamp—cut-off guide—large table size—and many other features. With the Hillquist Trim Saw you can do work you'd never attempt on any other machine. Immediate delivery! \$57.50 f.o.b. Seattle complete with 8" saw, belt, and motor pulley. Crating, \$2.00. Ship. wgt., 65 lbs.



Lapidary EQUIPMENT CO., INC.
NATION'S LARGEST MANUFACTURERS OF FINE GEM-CUTTING EQUIPMENT

1545 WEST 49th ST.
SEATTLE 7, WASH.



By RANDALL HENDERSON

THE STORM gods brought strange weather to the desert country this winter. January was the coldest and wettest month we have had in many years. It brought loss and hardship to some, but it also brought the promise of a better range and improved water supplies in the month ahead.

Folks living in regions of ample rainfall take water for granted. It is something they always have, practically without effort. But this is not true on the desert. Our water comes from springs and waterholes and reservoirs which are replenished only at long intervals—and those of us who have lived long years in this region have known thirst and drought as very real experiences.

Winter storms not only give security to our water supply, but the snow and the frigid winds which accompanied them this season are good tonic for desert dwellers. Extremes of temperature keep the adaptive functions in good working order and give vigor to both body and mind.

We don't always like this kind of medicine. We complain about the cold and the heat and the wind—forgetting sometimes that without these variations in environment we would become soft and sluggish. We strive for comfort and ease and luxury, and to the extent that we achieve these ends we bring about our own decay. Our history bears out this conclusion.

• • •

Last month Desert Magazine's editors predicted this will be a season of bounteous wildflowers—and that they would bloom earlier than normal. But the weather man crossed us up. He brought the coldest January we have known in years. He also brought rain which should make the flower parade more colorful than we had anticipated a month ago—but it will be later than normal.

While some of the hardier species already are blooming, it appears unlikely that the dunes and mesas will show great masses of color before early March. On the higher levels it will be from two weeks to a month later.

Of course we could be wrong again. We do not rate very high as weather prophets. Two or three weeks of exceptionally warm weather could change this schedule. But anyway, there surely will be a gorgeous flower show.

• • •

Recently David Jones, a cabinet maker of Los Angeles, brought to my office some of the most exquisite craftwork I have ever seen—lampstands, bowls and other

items made of seasoned ironwood picked up along the desert arroyos. The beauty he has found in those gnarled logs is no less miraculous than the rare designs which the lapidaries often find in the drab looking rocks picked up on the desert.

It is literally true that seasoned ironwood will not float in water. The fibre is so hard it blunts ordinary wood-working tools. But David has devised a lathe and other equipment for the job and with master skill is making products that will be hardly less durable than metal. After seeing the polished grain of some of this wood, my regard for the thorny ironwood has reached a new high.

• • •

Here at the Desert Magazine building the doors are open eight hours a day, seven days a week, for the visitors who come in increasing numbers to enjoy the fine art exhibit which occupies the big foyer of our desert publishing home.

Forty-odd painters of desert subjects are now displaying their work here—probably the largest collection of strictly desert canvases ever brought together in one place. There is no admission charge and no formality. Folks come and go all day long, and if they wish to browse in the book shop or go through the printing plant they are free to do so. We have no doors with "No Admission" signs on them.

We hope that sooner or later all readers of Desert will have the opportunity to enjoy for a little while at least the quiet beauty of the art room that has been created here.

• • •

Last New Year's eve I witnessed a most unusual drama. John Hilton was the villain in this act. Many years ago John called his friends in on New Year's eve to watch him burn some of his oil and canvas paintings. It has become an annual event—the burning of "his mistakes" as he calls them. When he doesn't like a painting after it is finished he stores it away for the New Year's bonfire.

This year he held his annual burning in Borrego valley, where 300 campers had assembled to listen to the Pegleg Smith Liar's contest. While the crowd protested, John tossed 11 canvases, large and small, on the flames.

I think it is a great idea. I wish some of us folks who are not artists could blot out our year's mistakes with as little injury to others as John is able to do.

FRAN
FRON

Frans would was ex frontier THE P sometin cattle r in ther the Sou before during

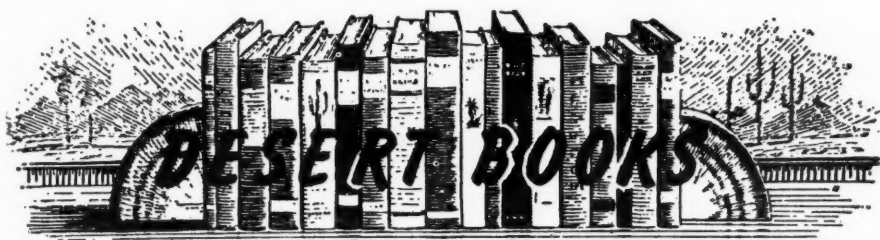
His didn't f grave t he insi cumstar possible fair fig evident ber of method had in on his before feet ag

King deputy miner, has kn many f the ma has str almost many c than th of the war an Ringo, Earps a

King han, fr from h the fam King sa Doc H "Johnny" polished loaded ling ab punctu

WRA lished i collecto "I wan book I book w of the Arizona be haro able fa realize, have ac and th since th "the cu who kil Trail Calif., photogr

MAF



FRANK KING REMEMBERS THE FRONTIER CATTLE RANGE

Frank M. King's early training, while it would not jibe with our present standards, was excellent for the rough and tumble frontier life he describes in *WRANGLIN' THE PAST*. The book is a valuable but sometimes grim recital of events on the cattle range. In the author's words: "I tell in there what I saw and did while ridin' the Southwestern cattle range in the days before an' after wire fences was known an' during the Big-Time cow works."

His father told Frank that gentlemen didn't fight unless the cause was sufficiently grave to shoot it out with guns, but that if he insisted upon fighting under other circumstances to go in and win in any way possible, as there was no such thing as a fair fight. How this training worked out is evident in the author's description of a number of his brawls in later life, where his method of fighting was to "give him all I had in the pit of his stomach," then "stomp" on his opponent's face with cowboy boots before the downed man could get to his feet again.

King has been cowboy, bronco-buster, deputy sheriff, customs officer, prison guard, miner, newspaper writer and politician. He has known intimately the leading figures of many famous events and has participated in the making of much Western history. He has strong opinions—possibly biased—on almost everything which happened. And in many cases he presents a different version than that generally accepted. He tells stories of the Tonto basin war, the Lincoln county war and Billy the Kid, the death of John Ringo, and the Tombstone doings of the Earps and the Clantons.

King knew and worked with Johnny Behan, first sheriff of Cochise county, and from him obtained an interesting version of the famous O. K. corral battle in Tombstone. King says that, in that battle, the Earps and Doc Holliday shot down unarmed men. "Johnny Behan," the author says, "was a polished gentleman who didn't go around loaded down with artillery and swashbuckling about the streets seeking who he might puncture with lead, like the Earps did."

WRANGLIN' THE PAST was first published in 1935 in a limited edition, now a collector's item. About it Will Rogers said: "I want to tell you it's the best Western book I ever read." It isn't the best Western book written, but for a first-hand account of the harsh and rowdy frontier days in Arizona, New Mexico and Texas it would be hard to beat, and it is written in readable fashion. It certainly makes the reader realize, with thankfulness, how much we have achieved in the way of personal safety and the functioning of law enforcement since the days when, as King says, it was "the custom of our family to kill anyone who kills any member of the family."

Trail's End Publishing Co., Pasadena, Calif., 1946. 284 pps., many historical photographs. \$4.00.

MOUNTAINS THAT GO NOT UP BUT DOWN

"Names of some places and regions stir our imagination. They conjure up mental pictures of romance, beauty, mystery or grandeur. Such a magic name is the Great Southwest," says Weldon F. Heald in his Canyon preview of *THE INVERTED MOUNTAINS*.

The Southwest has had the most colorful and romantic past of any section of the United States, and its upside down country rivals any region on earth for natural wonders.

The "inverted mountains" region stretches entirely across northern Arizona from New Mexico to Nevada and reaches north into Utah in the vicinity of the town of Greer. Within its borders are three National parks, 18 National monuments, parts of seven National forests, a National Recreation area, and five Indian reservations. *THE INVERTED MOUNTAINS* is another volume in the American Mountain series. It is devoted to the geology, geography, and history of this remarkable area. The book is edited by Roderick Peattie with contributions from Weldon F. Heald, Edwin D. McKee, and Harold S. Colton.

McKee tells of adventures afoot and in the saddle and describes the long slow process of wind and water erosion in shaping this unique country. The chasms are the inverted mountains. Harold S. Colton, director of the Museum of Northern Arizona, presents the Indians of the past and present. Man has lived in the Southwest for perhaps five thousand years, and innumerable ruins of past redskin cultures, some dating back a thousand years, have been uncovered.

Weldon F. Heald describes an exciting boat ride down the San Juan river from Mexican Hat, Utah, to Lee's Ferry, Arizona. He vividly imparts the breath-taking awe of Rainbow Natural bridge, and quickens the pulse with his account of explorations in Glenn canyon.

THE INVERTED MOUNTAINS is fine entertainment and furnishes a means of

exploring one of the few remaining wilderness regions.

The Vanguard Press, Inc., New York, 1948, 390 pps., many magnificent and unusual photographs. \$5.00.

STEPPING STONE TO MORE ENJOYABLE DESERT LIVING

Indian Wells Valley, lying in northeastern Kern county, forms the northwest portion of the great Mojave desert. *INDIAN WELLS VALLEY HANDBOOK*, compiled and edited by the Inyokern-China Lake Branch of the American Association of University Women under the direction of Frances Bullard and Lois Allan, is a collection of information on this vicinity. Interesting facts about the early history of the valley are revealed and the geologic history is simply and briefly told. A section is devoted to plants, birds, animals and reptiles native to the locality—with many fine illustrations. A complete scenic guide for the area is included.

These women deserve much credit for this achievement and *INDIAN WELLS VALLEY HANDBOOK* will find special appeal for the tourist as well as desert lover, and receive a hearty welcome from newcomers to the area.

The Inyokern-China Lake Branch, Inc., American Association of University Women, China Lake, Calif., 1948. 75 pps., Photographs, sketches, vicinity map, bibliography, table of contents.

ANSWERS TO QUIZ

Questions Are on Page 39

- 1—Quartz.
- 2—Polaris.
- 3—Teddy Roosevelt.
- 4—Species of wild hog found in southern Arizona.
- 5—Lily family.
- 6—Big Bill Bradshaw.
- 7—Aid the conquest of California.
- 8—Lumber industry.
- 9—Navajo.
- 10—Bennett-Arcane party.
- 11—Salt Lake city.
- 12—Colorado river.
- 13—Carlsbad caverns.
- 14—Silver at Tombstone.
- 15—New Mexico.
- 16—Virginia City, Nevada.
- 17—Smoke tree.
- 18—Ceremonial purposes.
- 19—Gallup, New Mexico.
- 20—Species of date grown in Coachella valley.

The Story of Death Valley . . .

Among the many volumes revealing the history, geography, mining, nature and lore of California's Death Valley, here are two books of special interest:

DEATH VALLEY AND ITS COUNTRY, by George Palmer Putnam. Geology, plant and animal life, mining, Indians, pioneers, tourists and rockhounds . . . highlights of America's most incredible desert. . . . \$2.75

DEATH VALLEY, THE FACTS, by W. A. Chalfant. Standard handbook, again in print. Geography, climate, water, geology, mining, plant and animal life. With end maps. . . . \$2.75

Postpaid to You . . . California Buyers Add 2½ Percent Tax

DESERT CRAFTS SHOP

Palm Desert, California

A New Development--*Sunair*

WELCOMES A NEW INSTITUTION THE DESERT BANK



Work is now underway on the Newest Addition to the business economy of this expanding Desert Community . . . and we are happy that it's organizers

chose SUNAIR for its location . . . and in so doing give a new expression of confidence in the future of the whole area and SUNAIR in particular.

Many forward looking investors are following their lead, and we continue to SELL both Business and Residential lots to those with an eye to the future and . . .

Sunair
AN HOUR MORE SUN

INCREASING VALUES

TRACT OFFICE OPEN DAILY
9:00 A. M. to 5:00 P. M.

Phone Palm Springs 1522

On Highway 111—6 Miles East of Palm Springs